The
SHIPPING WORLD
AND SHIPBUILDING & MARINE ENGINEERING NEWS

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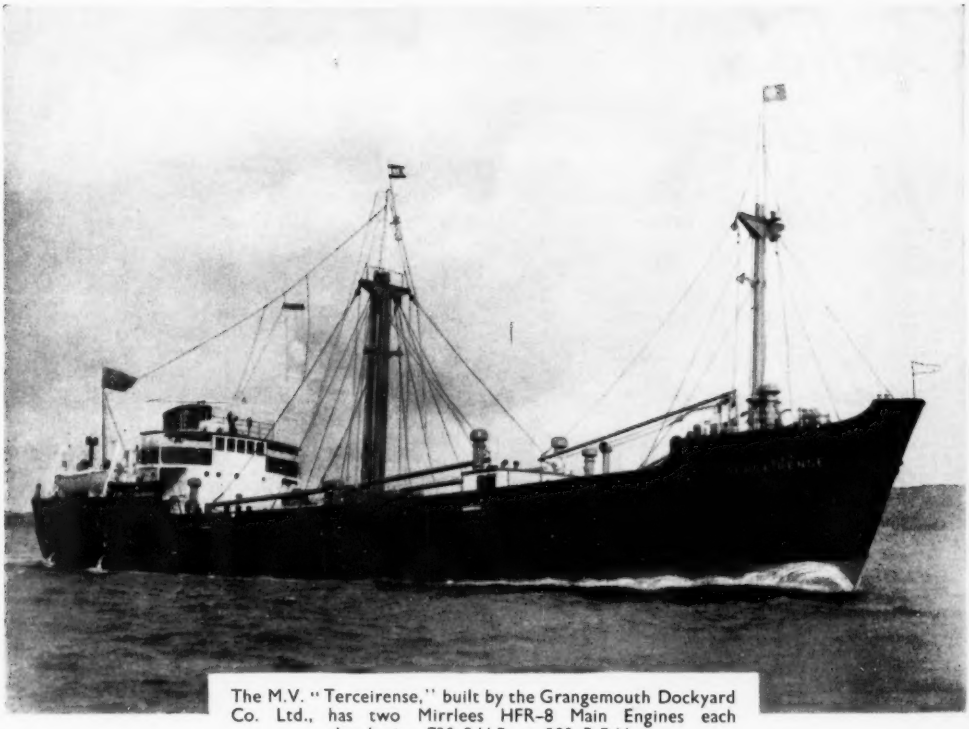

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The SHIPPING WORLD

AND SHIPBUILDING & MARINE ENGINEERING NEWS

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THE SHIPPING WORLD

A CENTENARY OF SERVICE

CENTENARIES are very much in the air just now, possibly as a result of holding the Festival of Britain this year. The prime justification for the Festival seems to be merely the fact that we had a similar exhibition in 1851. By contrast, the centenary of the Royal Mail trans-Atlantic service to South America in January this year offers perhaps a better opportunity for appraising the results of continuous enterprise and initiative since January 9, 1851. At that time the South American countries were in a very early stage of agricultural and industrial development, and there can be little doubt that Royal Mail Lines has played a very considerable part in the progress made in trade and commerce between Europe and Brazil, Uruguay and Argentina. The Government of this country frequently express their views on the importance of shipping earnings in the national economy, and it might, therefore, be expected that they would take any opportunity presented to pay tribute to the work of particular companies in earning invisible exports. As it happens, and despite any kind words which may have been said, the only concrete action of the Government which coincides with this important centenary is one calculated to discourage rather than encourage the kind of enterprise shown by the company for a hundred years.

It is ironic that the outstanding feature of the trading between Argentina and Britain during the last year of a century of progress and development should have been the cessation of meat shipments since July, 1949. The breakdown of negotiations on meat purchase benefited neither country, and provides yet another illustration of the adverse effects which government bulk trading can have upon the normal flow of world trade. Nor was it merely the ordinary people in both countries who suffered from this break in a long-established trade between Argentina and Britain. The effect on Royal Mail Lines of the loss of meat freights has been, inevitably, most serious in view of the large amount of refrigerated and therefore expensive tonnage in the company's fleet. It would have been worse than has actually been the case but for the success which has attended the efforts made to secure alternative business, but this is merely one more example of how private enterprise has to work harder to make up for the losses incurred by bulk trading. The plain fact is that the Government have a direct responsibility for the loss of shipping income incurred because of their ineptness in trade negotiation. The Ministry of Food have been more than ready to take full advantage of the facilities provided by shipowners; they have never had cause for anxiety as to the provision of adequate ocean transport and continuous service, and when the continuity of service breaks down only because of failure of that Ministry to preserve a long-established and essential trade their responsibility is clear.

It should be apparent that without some safeguard against severe losses of this kind no business firm could afford to maintain sufficient and efficient ships for the purpose, never knowing from year to year whether such specialised tonnage will in fact be required. Mr. Walter C. Warwick, chairman of Royal Mail Lines, Ltd., has said that it was still hoped to persuade the Government that the shipowners concerned were entitled to a reasonable measure of compensation for losses sustained. To do otherwise would be less than justice, and as regards Royal Mail Lines a very poor commendation for a century of excellent service. It is encouraging that the new Anglo-Argentine Trade Agreement will lead to a resumption in shipments of chilled meat, but the question may well be asked how long this re-opened trade will continue? Will shipowners charged with the duty of building probably the most expensive type of cargo ship afloat and maintaining their existing fleets efficiently be faced with further losses of trading owing to bulk purchase and its lack of trading elasticity? Upon these questions will depend whether the Royal Mail and other lines will exist one hundred years hence.

Current Events

Freight Rates

IT IS inconceivable that the Minister of Transport would permit vociferous and ignorant M.P's on his side of the House of Commons to dictate policy to him in the matter of rates of freight. As Mr. E. H. Watts pointed out the other day, the British share of the world's tramp tonnage is not large enough to curb the upward trend of rates of freight. "All that the Government would be doing by cutting rates for British ships would be to put them at a disadvantage vis-a-vis their foreign competitors." As he observed, there is nothing new in a mistaken policy of this sort by the Government. During the two world wars the lowest possible rates of freight were paid to British shipping, while foreign shipowners were bribed with very much higher rates for chartering their ships for the war effort. "It is a matter for some alarm that Government Departments never seem to learn from experience, and we understand that the Treasury intend to impose the same crippling war risk policy that was so inferior to what they offered foreign owners and so much against the national interest in the last two wars." The long and short of it is that the Government, by its taxation policy, is already placing a severe handicap on shipowners in their efforts to strengthen their fleets. Mr. Watts revealed that in the case of the Britain Steamship Company, the cost of replacement, taking into account the balancing charge, would leave a deficit of

£1,150,000. Other companies are faced with the same problem. As he remarked, "Wars have always brought inflation in their train and consequently heavy cost increases in manufacture, shipbuilding, etc." In his opinion, the time has come for new and fair negotiations with the Treasury direct. "They must understand that the shipping industry is the only one 100 per cent open to foreign competition and that it is neither in the country's, the industry's, nor indeed the Treasury's interest that the industry should be handicapped in its fight with foreign competition." Shipowners, liner and tramp, will agree that the matter should be no longer sidetracked and that the Government should be reminded that, in the event of war, the country will need all the ships, efficient ships, which it can secure.

Europe's Coal Deficit

A report from Geneva states that a coal crisis is developing. The United Nations Economic Commission for Europe estimates that for the third quarter the amount of European coal and coke available for export will fall short of the requirements of European importers by more than 10,000,000 tons, or 4,000,000 tons more than in the current quarter. The increase in the deficit is believed to be due to the low level of stocks in importing countries, the attempt of Scandinavian nations to import more during the summer months when their ports are free, and the desire to use coal in place of costlier fuel oil. Though coal has been largely supplanted by oil fuel, it still plays a considerable part in the economy of the Continent, and this country could be reaping a rich harvest if it were able to export anything approaching the volume of coal that it did before nationalisation cast its shadow over the coalfields. The National Coal Board seems never to have realised that we have only one raw material of any importance, and that it is exchangeable overseas for food and other raw materials. If the shipping industry and insurance and other activities under private enterprise were not providing invisible exports of the value of not far short of £150,000,000 a year, we should be in a very bad way. As it is, the trading gap continues to increase month by month owing to the cheapness of our visible exports and the dearness of our visible imports. The position is so grave that the unconcern of Ministers in inexplicable. Any normal Government would be in consultation with Lord Hyndley and his colleagues as to further measures to be taken to increase output and so set free more coal for export and for use as ships' bunkers. Perhaps the new President of the Board of Trade, who seems to be more alive to his responsibilities than his very self-satisfied predecessor, may rise to the occasion.

Plans and Reality

Our own busy planners have discovered that it is one thing to draw up schemes, and quite another to carry them out. For a long time there has been talk in India of a great merchant fleet which was to make it unnecessary to rely upon shipping under other flags. But, though India is now independent, she is not financially strong, and the Government finds that it has to cut its coat according to its cloth. The time is not favourable for carrying out the plans of expansion of which so much was heard a few years ago. Whereas it was hoped to have 2,000,000 tons under the Indian flag, there is today less than 400,000 tons, with little prospect of an increase to the limit of vision. In the past six or seven years over £15,000,000 has been invested in Indian shipping. The necessary capital is not now available to build an industry which has to compete with well-established foreign lines. It is reported that Indian shipping interests realise that the first essential in promoting the country's shipping is increased tonnage. This depends upon having an efficient shipbuilding yard. Even if India had the money, the chances of obtaining ships from abroad are small in the present international situation, with Anglo-American rearmament programmes dominating the scene. In spite of circumstances which might seem to favour shipbuilding in India, the cost of construction at the Vizagapatam yard, which is the property of the Scindia Steam Navigation Company, is a good deal higher than in British and other yards. So something like an impasse has been reached. Owing to the scarcity of tonnage, the price of second-hand ships is high, and new tonnage cannot be built at Vizagapatam which can compete with the vessels under British and other flags. It is now stated that the Scindia company would like the Government to take over its yard, but, in view of the present financial stringency, it is unlikely that the administration will agree to the proposal. So for the time being, the plans for expansion will have to go into cold storage unless little less than a miracle happens. The miracle is the inclusion of a provision of Rs.105,000,000 (£7,875,000) in the Colombo Plan, covering a period of six years from the middle of 1951, to make possible the purchase of vessels and the reservation for sale to Indian companies at world prices of ships built at the Vizagapatam yard.

Cargo Packing Investigation

In February 1949, a meeting at the Maritime Exchange of New York, composed of representatives of shippers, consignees, steamship companies, marine underwriters, manufacturers, freight brokers, suppliers and packaging organisations, decided to investigate "appalling losses caused by inadequate packaging of cargo transported by vessels in the United States to foreign ports." Eventually, as a result of this decision, the cargoes of 21 vessels plying in eleven different trades were examined prior to loading and after discharge. During the pre-shipment surveys, containers which were considered likely to be damaged under normal export conditions were classified as "suspect" and steps were taken to ensure that such containers would be the subject of special examination on discharge. The ultimate result of the investigations was that the damage to the "suspect" cargo proved to be due, to the extent of 65 per cent, to the packaging; loading accounted for 3 per cent of the damage, stowage for 7 per cent, discharge for 15 per cent, and 10 per cent was due to breakage as a consequence of pilferage. As a result every shipper whose packages were initially "suspect" and later proven to have been faulty, received a letter pointing out the defects. Carriers whose cargo handling called for improvement were written to also, and it is probable that in both cases remedial measures were taken. Now the committee responsible for the investigation has submitted a final report, the gist of which is that the cure for inadequate packaging lies mainly in cooperation between carriers and cargo interests. It is not thought to lie in the promulgation of minimum requirements for packaging, nor in the creation of a bureau to supervise or control packaging, while Government intervention is considered undesirable. The Committee recommend that the Maritime Association of the Port of New York appoint a permanent packaging committee, on which at least one packaging engineer should serve with representatives of cargo interests, carriers and underwriters. It is also recommended that the Association, in conjunction with this committee, should undertake a claims prevention programme.

A Combined Transport Document

When goods are dispatched from Lyons to a town in the Mexican interior, they are sent by rail to Le Havre, where they are shipped on board a vessel bound for New York; there they are transhipped to another vessel which takes them to a Mexican port, whence motor lorries will carry them to their destination. Against which carrier can action be taken in respect of goods damaged or found short on delivery? This question was asked recently at a meeting of the General Transport Commission of the International Chamber of Commerce. The subject has been reviewed by a

study group of the I.C.I., and a draft convention for an international through-transport document was discussed, one which provided either for the application of existing conventions or the application of special rules of liability. Desirable though it may be to have a universally accepted through-transport document of this nature, the general conclusion of the meeting was that the question of liability in combined transport operations of this nature was still too controversial to allow of a final settlement at the present time. It was decided to continue the study of the problem, however. It is interesting to note that while there exist international conventions concerning liability of carriers in transport by rail (Berne Convention), by sea (Brussels Convention) and by air (Warsaw Convention), so far there is no convention covering transport by road or inland waterways. A draft convention to remedy the deficiency is being prepared by the International Chamber of Commerce, in conjunction with other organisations, among them the International Marine Insurance Union.

Great Financial Strength

FEW industrial companies can show greater financial strength than is displayed by the Peninsular & Oriental group in its accounts for the year ended September 30 last. But few boards of directors have a greater financial responsibility. In this lies explanation of the company's continuing conservatism of finance: the increase in the distribution on the deferred stock by 4 per cent to 16 per cent implied not the slightest deviation from the company's long-established restraint in dividend policy. This has given an appearance of almost excessive financial strength to the group balance sheet: it reveals an amplitude of liquid resources for all normal trading purposes and to meet capital commitments of £2,900,000. Included in current assets are an investment portfolio having a market value of £34,200,000 and a cash holding of £8,800,000. A casual observer might consider this liquidity to be excessive. But shipping directors have to look far ahead in the planning of their financial and trading policies. In the case of P. & O., as of other shipping undertakings, some of the older members of the fleet are nearing the time when it will cease to be an economical proposition to continue running them. The building of additional tonnage cannot, therefore, be postponed if the group is to provide an adequate and competitive service. Fleet modernisation will become an increasingly heavy charge: liquid resources which now seem excessive may ultimately prove to be insufficient. The extent of the task that faces the P. & O. group in ensuring the maintenance of its vessels at full strength may be gauged from a study of yet another balance sheet figure, namely, the fleet account, whose book value at the financial year-end was £80,000,000. To replace the fleet, ton for ton, would, of course, cost much more than that. The fleet is very moderately valued by the implanted standard of current costs of new construction. That is additional evidence of the group's sound finances and, if further proof be required, it need only be mentioned that in the impressive reserve total of £71,500,000 is a fleet replacement fund of £42,800,000.

The 50-50 Clause

ALTHOUGH the existence of opposition within the United States to the subsidising of the American merchant marine is well known, the provision that 50 per cent of E.C.A. cargoes should be carried in American bottoms, the cost of which to the United States is less obvious, has been considered to command general approval in the country. It therefore comes as rather a surprise to hear that a spokesman for the U.S. Committee for Economic Development has told a Press conference that the committee is in favour of the abolition of this provision. A recent report of the committee stated that the shipping and agricultural policies of the United States "are in many respects more protectionist than can be justified on grounds of national interest. They severely limit the ability of allies to earn dollars by sending us goods and services." This, of course, is no more than sound business sense. The committee includes leading members of industry, banking and journalism in the United States: its purpose is to give the business man's view on U.S. economic policies. Among its members are General Eisenhower and, curiously enough, Mr. William Foster, the E.C.A. administrator. An E.C.A. spokesman later stated that Mr. Foster had had nothing to do with the writing of the report, and pointed out that oil shipments had already been exempted from the provisions of the clause. It is unlikely that, by itself, this report will carry sufficient weight in the United States to bring about a revision of the 50-50 clause; it may well, however, encourage E.C.A. recipients, who have hitherto felt obliged to refrain from protest, to put forward a case against it.

Financing New Construction

THE ACCOUNTS of the Thomasson Shipping Company for the year ended October 9 last reflect but faintly the improvement in freight rates that followed the outbreak of hostilities in Korea, and which is still maintained. In the circumstances the company did well to record a profit on voyages that was only slightly lower at £96,000 against £106,000. The net figure of £46,000 just covered the 15 per cent dividend payable on a larger capital—after the deduction of income tax charges totalling £27,200. The current financial year will, of course, fully benefit from the rising trend of freight rates, though a further increase of costs must also be brought in to the reckoning. Then in the financial year 1952/53, reserve should be augmented by the earnings of a cargo vessel of 10,200 tons d.w. recently ordered, and due for delivery at the end of 1952. The cost is not stated, but the necessary financial arrangements have been made. Consent has been obtained from the Capital Issues Committee for the company to borrow up to £250,000, while the company's backers have agreed to take the steps needed. In this connection the chairman of the company, Mr. J. F. Thomasson, points out that, if freight rates remain as strong as at present and if the company is not penalised by the withdrawal of the initial allowances, it may not be necessary to make large use of these financing facilities. In any event, he adds, it should be possible to repay any borrowing within a comparatively short time. The present book value of the fleet is £104,500, after a depreciation provision of £161,000. That is a conservative valuation. Reserves amount to £113,700 (including £29,000 for future taxation) and compare with an issued one-class capital of £240,000. The reserve total will doubtless be raised to a still more adequate level—£160,000 was withdrawn to service the scrip bonus of 200 per cent—as occasion offers.

Results of Torquay

THE schedule of tariff concessions conceded at the Torquay conference has now been published. If the results are evaluated numerically, in terms of the numbers of concessions made, the conference might be considered a success, for approximately 8,800 concessions were made, as compared with 5,000 at the previous conference at Annecy. A good number of these can be attributed to the countries acceding for the first time, among which was Western Germany, which made some 1,200 concessions. The other new acceding countries were Austria, Korea, Peru, the Philippines, Turkey and Uruguay. The accession of these additional countries is one of the chief advantages to world trade to come from the conference. The other was the continuance of the entire tariff reduction schedule, as modified, for a further period of three years. The new reductions made by the countries which had taken part in the earlier conferences at Geneva and Annecy were not, perhaps, as extensive as had been hoped. But it may be that some of the hopes expressed beforehand were too ambitious. The earlier conferences had largely exhausted the supply of easy concessions, and it was

clear that there would be more bargaining at Torquay. The Atlantic remains the most important trade channel, and further concessions affecting trans-Atlantic trade were hampered by the inability of the United States to secure further reductions in Commonwealth Preference, an ambition which, it may be suspected, has roots in politics as much as in trade. But, as the Secretary for Overseas Trade pointed out in the House of Commons afterwards, the offers which the United States was able to make in exchange were insufficient to balance any further concessions on our part.

Cargo Liner Propulsion

WHILE there are few who would challenge the superiority of the slow-speed diesel engine for the propulsion of ocean-going tramp ships, with speeds of from 11 to 13 knots, opinion has up to a quite recent date been divided as between geared steam turbine and diesel propulsion for the faster cargo liners, that is of from 16 to 18 knots. If anything, during the postwar years the balance of choice has been for the geared steam turbine with higher pressures and temperatures. Though availability of large power diesel machinery was for a time a factor weighing against the oil engine, the technical reasons for choosing turbine machinery for fast cargo liners were principally the saving in weight and initial cost as compared with diesel machinery, and the greater ease of employing from 12,000 to 16,000 s.h.p. for single screw propulsion with steam machinery than with oil engines. These advantages are fast disappearing. The New Zealand Shipping Company's new liner *Ruahine*, although twin-screw, and therefore a relatively more expensive ship to power than a single-screw vessel, has been designed to burn boiler fuel, while eight other ships of the New Zealand Line's fleet also operate on heavy oil. This means that the cost of fuel per day is very much in favour of the diesel-engined ship, while the weight of bunkers and propelling machinery for this ship, taken together, must be less than the greater quantity of bunkers and lighter machinery weight with a steamship of the same power, in view of the large cruising radius. The next step, and one which it is understood this company has already projected, is to adopt twin diesel engines geared to one shaft. With such an arrangement it will be possible to have all the advantages of single screw propulsion for ships of up to 16,000 s.h.p., the same weight and possibly the same cost as a steam turbine installation, and a fuel bill about 23 per cent less than with steam machinery. Steam turbine machinery will have to show a very great saving in maintenance to combat such modern adaptations of oil-engine propulsion.

Water Services in Ships

IT IS surprising, in view of the importance of the fresh and salt water services in ships of all types, that until comparatively recently the basic principles of supply had not changed since the earliest days of steel shipbuilding, and even the introduction of power pumps for filling daily service tanks only became general for cargo ships during the interwar period. Until the outbreak of war in 1939, most cargo ships still relied upon gravity supply from the daily service tanks, which by necessity were located on the boat deck for supplying accommodation round the engine casing, and on the navigating bridge for supplying the midship houses. With the advent of rules requiring much greater quantities of fresh water to be carried, usually stored in the aft peak in wartime built standard ships, the matter of maintaining a more efficient system with a more uniform pressure in supply became of greater importance, and some attempt was made to make the system automatic by having float or pressure switches in the gravity tanks which when the tank emptied to a predetermined level started the supply pump. To maintain maximum pressure head in the system it has been common for a considerable amount of overflowing from gravity to main supply tanks to take place, which wasted power and not infrequently caused damage to the cemented surface in tanks. Obviously what is required is some completely automatic system, preferably one which does not require the supply to be maintained by gravity. Particulars of the Drysdale patented "Pneupress" system which have recently been made available indicate that a satisfactory method has now been evolved. The pressure supply tank can be installed at any convenient position in the vessel, while the system incorporates a special principle which is known as supercharging. The pressure tank is connected to a source of compressed air which supercharges the air in the tank to a point where its pressure is sufficient to raise water to the highest point in the system, even when the level of water in the tank is only a few inches from the bottom. By this means the size of the tank required for a given water storage between pump stopping and starting pressures is considerably reduced.

De-Salting Salt Water

MR. STANLEY SMITH, who with his brother crossed the Atlantic in 1949 in the 20-ft. sloop *Nova Espero*, has begun an attempt on the more difficult East to West crossing with a new companion, Mr. Charles Violet. For the return trip the *Nova Espero* has been re-rigged as a yawl, and the dinghy which was inverted over the forward end of the cockpit to provide shelter on the earlier trip has been replaced by a permanent cabin. On account of the small size and light displacement of his boat, which would prevent his making satisfactory progress against head seas, Mr. Smith is going well to the South in search of favourable winds before heading westwards. He expects to be at sea for about three months. The *Nova Espero* is carrying no water on this trip, reliance being placed entirely on the Permutit desalting kit for the production of fresh water from the sea. This kit was first developed in 1942 for use by bomber crews brought down in the sea, and since then has been employed extensively in military and civil aircraft, while a specially protected version, developed for the Admiralty, is used in lifeboats. It is this type that is being taken by Mr. Smith. Each kit yields half a pint of water at a time, and may be used nine times, making 4½ pints of water in all. On this voyage 100 kits are being taken, giving a total of 55 gallons of fresh water. Each kit comprises a drinking box, a purifier bag, and a number of small brickettes containing special zeolites. For use, a measure of sea water is poured into the purifier bag and a brickette is added. The bag is then shaken for half-an-hour, and a quite palatable drinking water is produced. At sea, it is sufficient for the bags to be hung in the rigging and shaken by the motion of the boat. The saving in weight and space is very considerable, comparable figures being 225 lb. and 2½ cu. ft. for de-salting kits, as against 550 lb. and 8 cu. ft. for the equivalent amount of fresh water in containers. These kits are expensive—the *Nova Espero* will carry £700 worth—but in the sealed form they last almost indefinitely.

SAYINGS OF THE WEEK

IMPORTANCE OF INSURANCE BUSINESS

"British insurance is among the most successful of commercial enterprises in this country, and outside the Iron Curtain there is not a single country where important local and national enterprises in the municipal, industrial and commercial fields are not protected by British insurance."—*Sir Hartley Shawcross*, President of the Board of Trade.

RETURN TO NORMAL

"I venture to think that if only it were practicable to re-establish the normal trade channels, it would not be very long (in the absence of wars or other major upheavals) before shortages, and the disproportionate price levels which result from them, would create their own antidotes, resulting in an improvement in supplies and the regulation of prices in fair and proper relationship to costs of production and transport."—*Mr. Walter C. Warwick*, chairman of Royal Mail Lines, Ltd.

ON THE "BALTIC"

EMPHASIS ON ATLANTIC TRADE

By BALTRADER

WE HAVE almost reached the early summer, when light airs or doldrums are not uncommon in the freight markets; but the overall demand for shipping shows little or no sign of a decline. The emphasis has slowly swung from the Pacific and Australian waters to the Atlantic in spite of a natural lessening of the pressure for early tonnage to bring coal from America to Europe. Even in that section of the market single and particularly consecutive voyages are being arranged well ahead, no doubt to ensure that stocks of coal on this side shall not approach the danger limit as they did when last winter set in. The strength of the position on both sides of the Atlantic is due to the activity of recent chartering for grain from the St. Lawrence and the United States to the United Kingdom and Continent, as well as to the constant requirements of the ore and phosphate charterers of tonnage from the Mediterranean. The short supply of tonnage in the Western Mediterranean and adjacent areas is shown by the firm rates offering from Algeria, Tunisia, Morocco and South Spain. Activity in chartering from Huelva is noticeable as a result of the demand for pyrites, from which sulphuric acid is derived. There has been competition for ships to load timber in the Baltic and White Sea for the U.K. and Mediterranean salt destined for the Far East. With so much choice of employment offered to owners it is not surprising that full rates have had to be paid by the liner companies for vessels to make trips from this side to Australia, East Africa and Indo China. Similarly, the lines have offered good inducement to engage vessels for one or two West African round voyages.

Chartering by Liner Companies

It has, in fact, been a feature of the last few weeks that the liner companies have been showing a good deal more interest than for some months in chartering tramp ships to relieve the congestion of cargo awaiting shipment. The position of the exporters of manufactured articles was becoming serious and they were, therefore, willing to bear a substantial increase in Conference rates. The only alternatives were to suffer the consequences of a reduced service or to charter vessels for their own account. The latter course has been adopted in some cases and very high rates on charter have been paid, but manufacturers or merchants who export general cargo generally prefer to book their freight by the lines; they do not wish to be involved in matters foreign to their own business, such as stevedoring expenses and possible demurrage. Eastwards from Suez to Panama, the principal markets are quieter than for some time past. Australian charterers have taken so much shipping to load grain for Ceylon, Egypt and Europe, and the ports of Australia are so fully occupied, that little further employment is offering for some months. South Africa is pausing as a result of continuous and heavy chartering with coal from Lourenco Marques or Durban to the Red Sea, Pakistan, Italy and Denmark. As on many previous occasions, the heavy traffic has overstrained the South African railway facilities and shortage of trucks has lately been mentioned; breakdown of a loading appliance at Lourenco Marques has caused delay. Demand for South African coal, however, is likely to be well maintained and rates of freight from that area should remain firm. Mauritius sugar has yielded an advance of 2s. 6d. to 145s. per ton for discharge in the United Kingdom. In the East there is good inquiry for shipments of coal and ore from India to Japan; in the opposite direction, fixing of tonnage by the Baltic Chartering Committee has been active for cereals from Dairen to India. Many owners have shown interest in this business and the committee has secured a slight reduction in rates as a result. Chartering from Dairen to Europe with soya beans and cereals has lately almost ceased, to the disappointment of those owners who were willing to trade to Manchuria in return for the exceptionally profitable freights offered from there. Freights offering from the North Pacific are rather unattractive to owners whose vessels approach readiness on the other side of the Pacific after discharge of ore, coal or salt in Japan. The North Pacific, in fact, is a comparatively dull market, but it is one which sometimes assumes unexpected strength on account of its remoteness from areas where trampships arrive with cargo.

The River Plate market shows little life, and the expected renewal of outward coal chartering from this country to Buenos Aires will interest owners only if full rates are offered, in view of the strong demand for tonnage on this side of the world.

The Freight Market

Although not many fixtures have been arranged in the past week for grain from North America, inquiry is well maintained for loading in the St. Lawrence to the United Kingdom and also, for commercial account, to discharge at near Continental ports. For loading in the Eastern U.S., the *Argyll*, 37,000 quarters, is fixed to U.K./Continent at 25s. per quarter, July 5/25, which repeats the rate previously paid. Cuba to U.K., sugar, has been chartered at the unchanged rate of 160s. for June/July. Coal from Hampton Roads to Rio has paid $16.75 and further tonnage has been taken for coal from Hampton Roads to the United Kingdom at 97s. 6d., June loading. The *Llanover*, 9,000 tons, is fixed for heavy grain from North Pacific to U.K. at 150s., July/August. The *Angusdale*, 9,000 tons, has obtained 162s. 6d. from up and down River Plate to West Coast India, heavy grain, June/July, but 127s. 6d. has been accepted from up and down River Plate option Bahia Blanca to U.K., Cork or Dublin, heavy grain, June/July. *Coralbank*, 9,000 tons, is fixed from West Australia to India at 138s. 9d., flour in bags, June/July, and *General Guisan* from West Australia, South Australia or Victoria to West Italy, at 160s., basis bulk wheat ex silo, September 15/October 30, or 2s. 6d. less if November 15 cancelling. The Chartering Committee has secured about 9 vessels for soya beans or grain from Dairen to Madras at 132s. 6d., option Madras and Calcutta 135s., for July loading. The *Margo* has taken a mixed cargo on guaranteed deadweight basis from Dairen or North China to Antwerp or Rotterdam at 197s. 6d., option Hamburg 202s. 6d., option Danzig or Gdynia 237s. 6d., July. This breaks the long sequence of similar fixtures which were based on 200s. to Antwerp or Rotterdam. Time charter has been a good market; representative fixtures are: *St. Elwin*, 9,200 d.w., 508,000 ft. bale, 10 knots on 22 tons oil, 52s. 6d. for two West African rounds, delivery Liverpool, June 25/July 16, and *Silver Wake*, about 9,250 d.w., 10/11 knots on 24/26 tons oil, $63,750 per month for 8/10 months, delivery United States north of Cape Hatteras, June.

Air Charter Business

Inquiry for charter planes has been mainly for carriage of passengers, including ships' crews. Holiday travel to and from the Continent accounts for a considerable volume of quotations for departures throughout the summer months. While employment with freight by air to the Far East has much declined there is a continuance of inquiries and fixtures for passenger flights in that direction and homewards.

ECONOMICS OF TURNROUND IN PORT

THE RELATIVE COSTS OF TIME AT SEA AND TIME IN PORT

By HECTOR GRIPAIOS, B.A., M.Sc. (Econ.)

HISTORIANS writing about events of more than a century ago are often better equipped with facts and material than the economist who attempts to identify current trends in ship operating experiences. This lack of published information must partly be due to the very diversity of various ship operations, which tends to make each case unique and of interest only to those directly concerned. However it may well be that this self-same diversity, which has deterred any co-ordination of operating experiences in the past, is the best reason for some kind of cooperation at the present time. It may well be that there exist today certain shipping problems which may only be solved, not only by cooperation between various shipping companies, but by joint action by owners, builders, and port and harbour authorities.

For example, during recent years there has been a serious deterioration in port turnround times. For a time many firms must have considered it an unfortunate, and temporary, occurrence restricted more or less to their particular spheres of activity. The passage of time has slowly produced an entirely different picture, for the deteriorated turnround times appear now no longer as a restricted phenomenon, or as one which is likely to be temporary. In fact the problem has such serious dimensions as possibly to change radically the principal objects of future improved ship efficiency, and to call under review long established methods of handling cargo in port. And what is more important it may be that the problems involved are such that they will not yield to independent action.

Improved Efficiency in the Past

Shipbuilders during the present century have applied themselves in the main, directly or indirectly, to two problems, namely, lower bunker consumptions, and higher cargo carrying capacities from vessels of the same dimensions. The particular merit of obtaining lower bunker consumption was that a double advantage was reaped from any progress that was made. Lower consumption resulted not only in lower fuel costs but also in greater cargo carrying capacity, and consequently revenue earning ability. The remarkable progress which was achieved in these two directions was illustrated in the 38th report of the Imperial Shipping Committee, in which vessels built at different dates were considered, which were of about the same size, and which were assumed to be performing a voyage of about 6,300 miles. The salient features are illustrated by the following figures:

TABLE I
PROGRESS ACHIEVED IN SHIP EFFICIENCY

	Pre-1914 coal-burner	1938 *coal-burner*	1938 *motor vessel*
Tons gross	5,002	5,171	4,960
Tons d.w.	8,400	9,250	9,200
Bunkers (per sea day)	30.5	20.0	6.7
Speed (knots)	10.0	10.5	10.2
Cargo capacity	7,390	8,600	8,943

The improved efficiency of the 1938 vessels over that of the 1914 coal-burner were described as a saving in bunker costs at 1938 prices of £338 per voyage by the 1938 coal-burner, and £513 per voyage by the 1938 motor vessel. In addition, as can be seen, there were substantial improvements in cargo carrying capacity.

This was a remarkable record of progress, which could compare favourably with the achievements of other industries. But what is equally remarkable is the lack of progress by comparison in the efficiency with which vessels were turned around in port. Oil tankers, ore carriers, and other special types of vessel will be an exception to this rule, and deteriorated port conditions in recent years, combined with less cooperation from dock labour, may have obscured much of the progress which has actually been made in improved vessel efficiency in port. But the fact remains that improved efficiency standards for dry-cargo tramps and liners have had a one-sided development during the present century. The comparative lack of progress in the efficiency of cargo handling facilities, combined with the serious and widespread deterioration in port conditions in recent years, has probably resulted in a complete re-orientation of the directions from which future improved vessel efficiency should come. It is proposed to show that improved efficiency in port is more to be desired at present than any other kind of improvements, and should absorb the principal energies of builders, owners and port authorities.

Before illustrating this thesis by some operating experiences, and by the costs of different classes of vessel, it is necessary to note the reasons which have caused so much attention to be paid in the past to improved efficiency at sea. It will be seen that some of the considerations which applied here in the past still prevail today, and there is a real danger of further progress along these lines being vitiated by the lack of balance between efficiency at sea and in port. The principal energies of the builder have been directed to obtaining improved efficiency at sea because the advantages which he could offer the prospective owner would most certainly be exploited in actual operation. This would not apply in the same way to improved cargo handling facilities which depend on the nature of the cargoes carried, and on the terminal ports actually used. The double advantage afforded by lower fuel consumptions, both of reduced bunker costs and increased cargo carrying capacity, was and still is, an attractive inducement. Additional reasons which do not still apply to the same extent would be the relative importance of improved bunker consumption at a time when they stood at relatively high levels, and at a time when bunker costs relative to port labour costs were expensive.

Diminishing Returns

But the principal incentive to progress along these lines has undoubtedly been first the general application of the benefits of progress irrespective of the employment of the vessel, and second the fact that a virgin field of possible progress was open to exploitation. It should be noted that although progress may still be made, that diminishing returns has already set in, and that future progress may only be achieved at a greatly enhanced relative cost. In addition, we shall see that fuel consumption is no longer the most important cost item, partly as a result of the very progress which has been made, and partly as a result of the changed relative price levels of fuel costs, and labour costs, etc., which go to make up total operating costs. Deteriorated port conditions have made no small contribution to this change of emphasis from the desirability of progress at sea to that in port.

(*To be continued*)

THE death has occurred of Capt. J. P. Drummond, marine superintendent of the Ben Line Steamers, Ltd.

PLANS have been completed for a £355,480-scheme for extending Sunderland Corporation Quay and the provision of a cold store. Government sanction to proceed with the work has not yet been received.

TENDERS are being obtained by the Tyne Improvement Commission for the work of diverting the River Don at Jarrow to prepare the land for use as timber grounds. The proposed diversion will begin 250 ft. east of Jarrow Bridge and continue 700 ft. in an easterly direction, and will involve the removal of 100,000 tons of material.

ROYAL MAIL LINES, LIMITED

CENTENARY OF SOUTH AMERICAN SERVICE INAUGURATION

Mr. Walter C. Warwick on Shipbuilding Costs and Taxation

THE nineteenth annual general meeting of Royal Mail Lines, Ltd., will be held in London on June 8, 1951.

The following is the statement by the chairman, Mr. Walter C. Warwick, circulated with the report and accounts:—

The present year, 1951, is an historic year for this company, as it marks the centenary of the inauguration of our regular mail and passenger service to South America. The Royal Mail Steam Packet Company had been incorporated by Royal Charter 12 years earlier, in 1839, and already maintained a service to the West Indies, but the provision of a transatlantic steamship service to South America commencing on January 9, 1851, was a pioneer enterprise of considerable importance in those days, and the maintenance and expansion of this service has undoubtedly played a considerable part in the development of trade and commerce between Europe and Brazil, Uruguay and Argentina. This, therefore, seems to me a particularly appropriate occasion, in celebration of this centenary, for the directors to recommend a special distribution of 2 per cent out of an available surplus on the realisation of investments. This, being a distribution out of capital profits, will not be liable to income tax.

Accounts and Finance

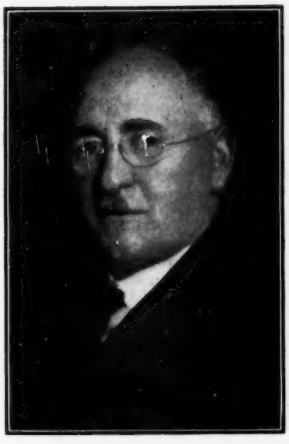
The accounts, which are presented to you in a somewhat clearer form than in previous years, include the balance sheet and profit and loss account of Royal Mail Lines, Ltd., together with a consolidated balance sheet and profit and loss account of the company with those of its subsidiaries, namely, the Pacific Steam Navigation Company, two small agency companies and a publication company, each of which showed a profit for the year. The consolidated balance sheet indicates the sound financial position of the group.

Cash and investments, without including tax reserve certificates, amount to approximately £12,000,000, which is a substantial figure, although it is necessary to bear in mind the high and increasing level of all shipping disbursements and the greatly increased cost of new tonnage.

Stockholders will notice a considerable increase in the amount shown as due from subsidiary companies. This arises from the large currency balances held by our subsidiaries in Brazil and Argentina which have accumulated through collections of freight and passage money. The lack of prompt remittances from Brazil and Argentina causes considerable anxiety and difficulty both in its direct effect upon this company and in its deterrent influence upon shippers to those countries. Since the end of the year under review, we have received some remittances, but the outstanding balance at present is unfortunately even larger than it was at December 31, 1950. In the case of Argentina, a large balance was outstanding when the peso was further devalued in August last, with the result that the company suffered a substantial exchange loss. Not the least of our anxieties arising from remittance delays is the vulnerability of the company to such losses.

South American Meat Trade

The outstanding feature of the year's trading has, of course, been the cessation of meat shipments from Argentina since July last year, following the abortive



Mr. Walter C. Warwick, chairman of the Royal Mail Lines, Ltd.

negotiations for the revision of the terms of the Anglo-Argentine Trade Agreement entered into in June, 1949. The breakdown of these negotiations was much to be deplored from many angles, and must have had a damaging effect upon British interests, since so much mutual trade of value to both countries has thereby been lost. It seems to me most unfortunate that Government bulk trading, which was a necessary expedient under the quite exceptional circumstances created by the war, cannot now be abandoned, leaving trade to find its own natural level and obviating the bitterness and recrimination which seem to become the inevitable accompaniment of trading negotiations between Governments. I venture to think that if only it were found practicable to re-establish these normal trade channels, it would not be very long (in the absence of wars or other major upheavals) before shortages, and the disproportionate price levels which result from them, would create their own antidotes, resulting in an improvement in supplies and the regulation of prices in fair and proper relationship to costs of production and transport.

Serious Effect of Loss of Freights

I made particular reference last year to the serious effect which the loss of freights on meat would have upon the company's interests, in view of the large amount of specialised refrigerated tonnage which the company had provided for the requirements of this trade. We have not been entirely unsuccessful in our efforts to secure alternative business, but the loss nevertheless has been severe.

Up to the time when the Government intervened during the war, the meat trade had been established on the stable basis necessary to justify the employment of a vast amount of capital for the rearing of stock, the building of large and highly organised frigorificos for the preparation of meat, and for the provision of refrigerated tonnage for its overseas transport to ensure delivery in prime condition. Under these conditions the meat shippers contracted direct with the shipping companies to provide the shipping space they required, and if space which they had booked was not utilised, they were liable to pay dead freight to the carriers. This degree of security was a valuable advantage in justifying the provision of the very expensive shipping space required for the volume of meat available, ensuring both that the shippers would have the necessary transport at their disposal at reasonable cost as it was required, as well as safeguarding the shipowner against any fortuitous and unexpected loss of freight.

It might be imagined that when the Government took over the trade they would unhesitatingly maintain the

arrangement which commercial traders had proved by experience to be effective and necessary for the well-being of their business.

The Ministry of Food did, in fact, take full advantage of the facilities provided by shipowners, which gave the Ministry continuity of service and relieved any anxiety they might otherwise have had regarding the provision of adequate transport. But when as a result of these high level Government negotiations meat was no longer available for shipment, and shipowners suddenly found themselves last July without cargoes for their ships, the Ministry were unwilling to recognise any obligation on their part to compensate shipowners for their loss. This situation has been the subject of prolonged discussions with the Government officials concerned, and it is only natural that the shipowners consider they have a justifiable claim for protection against such severe losses, incurred through circumstances entirely outside their control, and on account of their willingness to send their ships out to the River Plate to enable these Government cargoes to be brought home.

We still hope to persuade the Government that we and the other shipowners concerned are entitled to a reasonable measure of compensation for the heavy losses sustained.

It is a matter of real satisfaction that the new Anglo-Argentine Trade Agreement has at long last been signed, and particularly pleasing to know that there is to be a resumption of shipments of chilled meat for which our company's ships are specially fitted.

The full implementation of this new agreement should provide considerable additional revenue to this company. I trust the difficulties in regard to the remittance both of Argentine and Brazilian monies already referred to, will also be satisfactorily adjusted.

Passenger and Freight Services

With this one important exception of meat, conditions on all the routes on which the company's ships operate have remained relatively satisfactory. The ships have been allocated so far as practicable to satisfy the requirements of our clients trading with Brazil and the River Plate, the West Indies and Spanish Main, and the North Pacific Coast.

The company's passenger ships have catered successfully for the needs and desires of our friends and clients. The *Andes* and *Alcantara* have further enhanced their reputation on the South American route, and have earned praise from a great many discriminating passengers, whose opinion on the services we offer is always regarded as a welcome and helpful guide. The "Highland" ships also, in their more modest style, continue to receive general approbation, and the same applies to the passenger facilities we offer on board a number of our cargo ships.

Expenses

A very serious factor in the prevailing outlook is the continual increase of expenses of all kinds. These cumulative increases in wages, fuel, stores, cost of repairs and, in fact, all the innumerable items which comprise a ship's operating expenses, have necessitated increases in rates of freight and passenger fares, which are bound to go on rising progressively as expenses increase more and more. There have been many references in the Press in recent months to the rise in freight rates, which is considerable, but it should always be borne in mind that this refers only to the rates on bulk cargoes which are directly influenced by the supply and demand for tramp tonnage. Liner companies operating their ships in regular trades are, of course, unable to withdraw them to take advantage of these rises in the freight market and so benefit, if at all, only indirectly and to a very limited extent. Liner rates are controlled by the Shipping Conferences, and the necessity for increasing Conference rates, when it arises, is always a matter for regret, and is regarded with reluctance by the Conference Lines who, in general, much prefer rates to be maintained on a stable basis. In any case, increases, when they are decided upon, invariably lag well behind the increases in expenses which are their root cause, and they are usually a manifestation of inflationary tendencies which in the long run are of no real benefit to anyone, whereas they may in course of time even become a threat to the maintenance of healthy and prosperous trading conditions.

Shipbuilding Costs and Taxation

Shipbuilding costs continue to increase and constitute a grave problem for the future. New ships built under present-day conditions necessitate capital expenditure up to three times the cost of the ships they replace. It is mainly on account of the influence which this serious factor must have on the future health and welfare of the industry that all shipowners are so seriously concerned about the high level of taxation and the form which it takes, which precludes adequate provision being made out of present revenue for the replacement of tonnage in years to come. This is a matter which spokesmen for the industry at meetings of the Chamber of Shipping, the Liverpool Shipowners' Association and the other associations of shipowners, as well as the chairmen of individual companies, have stressed time after time, and I must add my voice once more to this chorus of protest. It is to be regretted that the recent Budget has increased the tax levied on profits, and has also withdrawn the initial allowances which, because of the vast sums shipping companies have to spend on new ships, were probably of greater immediate assistance to shipping than to any other industry. In my opinion the maintenance and expansion of the mercantile marine is an integral part of the rearmament programme of this country, and it is much to be hoped that the Chancellor of the Exchequer will sympathetically and helpfully consider the representations that are being forcibly put forward on behalf of the shipping industry.

New Tonnage

I mentioned last year that we contemplated ordering a cargo vessel of approximately 5,000 tons gross, similar to the *Brittany* and *Araby*, if suitable terms could be agreed with builders. You will note from the directors' report that two new motor vessels of this class, the *Ebro* and *Essequibo*, intended for the West Indies route, are now under construction on the Clyde by Harland and Wolff, Ltd. The accommodation which will be provided for 12 passengers in these vessels, with a private bathroom to each cabin, will be of a high standard and will, I feel sure, be found by travellers on this route to provide them with every comfort and generally satisfy their tastes.

These vessels are expected to be ready for service by February and April, 1952, respectively.

More recently the company has been negotiating for the construction of a new vessel for the North Pacific Coast route of a similar type to the *Loch Avon* and *Loch Garth*. Details of the design of this vessel are under active consideration, but it is not expected that the keel will be laid before the middle of next year.

Mr. Barber, the managing director, has made a further brief visit to South America, where he found our offices and agencies functioning with their customary smoothness and efficiency. The same can justifiably be said of the whole of the company's organisation, and I consider we are indeed fortunate to be so well served by our staffs afloat and ashore. One noteworthy feature of our organisation is the close cooperation and mutual confidence which exist in general between the personnel of the ships and our staff ashore and all our agents. It is my experience that this spirit of loyalty and comradeship which is so valuable an asset to any business permeates all the branches of our organisation, and I feel sure I may express on your behalf, as well as that of the directors, our appreciation, not only of the services rendered by all those who serve the company, but also of this spirit of cooperation which is general amongst them.

COAL AND OIL

TANKER RATES STABILISED

AFTER the recent headlong fall in spot tanker rates the past week has shown a steadier tendency. The sudden fall appears to have been caused purely by a temporary satisfaction of charterers' immediate demands, as rates for long-period business have not been unduly influenced by the precipitous fall in the day-to-day market. John I. Jacobs & Co., Ltd., report that while holidays have caused some interference with business, the main reason for the small number of fixtures is the severely curtailed demand and charterers' reluctance to fix except at successively reduced rates. In these circumstances it is difficult to assess market levels, but it is clear that there is little strength in single-voyage rates. On sterling basis, the best indication of the views of British charterers is an offer of MOT plus 50 per cent made for a June black oil carrier from Persian Gulf to U.K./Continent. Italian and Portuguese principals who have July and August openings from the Persian Gulf are indicating about MOT plus 50 per cent and plus 70 per cent respectively, the latter figure also being mentioned for a July gas-oil cargo from Caribbean Sea to Sweden. The sharp fall in the single-trip market does not appear to have materially influenced the views of either owners or charterers for long-period time-charter cover, although there is rather less activity at the moment. Some charterers who were negotiating consecutive voyages over about 12 months have now decided to watch developments, no doubt having in mind the possibility that there may be an easing in owners' views for this comparatively short period. Lambert Brothers, Ltd., report that the trouble in Persia still has its repercussions, especially regarding the cargo position in the west. The buying-up of cargoes from the Caribbean area by charterers on this side who would normally buy from Persian Gulf is still making conditions confused, leaving early tankers searching for cargoes.

Pipeline for Paris

CONSTRUCTION material has been collected and work is about to start on the Le Havre-Paris pipeline recommended in the Monnet Plan and authorised by a law passed in August 1949. The Petroleum Press Bureau reports that the line will have a diameter of nearly 10 inches and a length of about 150 miles. It will carry 1.5 million tons of products annually from the mouth of the Seine to Paris, and should be in service by the end of next year. The ownership and operation of this new service—the first long-distance products line in use in peacetime in western Europe—has been entrusted to TRAPIL, in which the State, directly and through State-controlled interests, is the majority shareholder. A number of oil companies are also shareholders. The company's subscribed capital at present amounts to Fr.890 million (about £900,000), but the full cost of the project may be two or three times this figure. French consumption is markedly concentrated upon the Paris region, where about 20 per cent of the country's total gasoline and fuel oil supply finds its outlet. Before the war, lighters on the Seine and—at times of peak demand—the excellent rail network sufficed to carry the capital's oil needs from the seaboard. The much-expanded scale of the postwar oil trade—in the three years 1949-52 total sales in France are expected to rise by almost 40 per cent—has, however, called for the construction of this new channel of supply which, given the volume of trade and its geographical distribution, is the most efficient means of meeting the higher needs of the Paris region.

Shorter Items

IN contrast to the decline of South African and American coal imports into Argentina during recent years, imports of British coal have substantially increased. According to figures issued by Chadwick, Weir & Cia. (Argentina), Ltda., of imports of coal, coke and anthracite into Argentina during 1943-50, the import of South African coal has fallen from 642,554 tons in 1946 to 126,834 tons in 1950. American coal imports have declined from the 1947 total of 923,697 tons to 46,587 tons last year. Imports of British coal, however, were 973,689 tons last year, compared with 979,866 tons in 1949, 863,272 tons in 1948 and nil in 1947. Total imports from all sources increased from 1,361,766 tons in 1949 to 1,447,838 tons in 1950.

MINES under the control of the South Western Coal Board produced 8,453,000 tons of coal during the first 17 weeks of this year, an increase on the output of 8,228,900 tons in the same period of last year. Due to the shortage of railway wagons, the Spanish trade has been benefiting by larger exports from South Wales ports in recent weeks. There is, however, little prospect of much new export business being conducted for some time.

A GIFT of £35,000 to the Royal Technical College, Glasgow, has been made by the Anglo-Iranian Oil Co., Ltd., and one of the Shell Group of companies. In announcing the gift, at the opening in the college of the "Exhibition of the Petroleum Industry," Mr. T. W. Lyle, general manager of Scottish Oils & Shell-Mex, Ltd., said that this contribution to the extension of the college would be spread over seven years under covenant.

OFFICIAL NOTICES

New Companies

KAUPO STEAMSHIP CO., LTD.—Registered May 1. To carry on business of ship owners and brokers, etc. Nominal capital: £13,200 in £100 shares. Directors: Irma Reinhards, 52 Clifton Gardens, London, W.9; P. Reinhards, 30 Pelham Road, Gravesend, Kent; P. Prieditis, 30 Clarence Road, London, N.22.

[Information from *Jordan's Daily Register of New Companies*]

WILRONWOOD FISHING CO., LTD.—Private company. Registered May 3. Capital £5,000 in £1 shares. Directors: George R. Wood and Elsie Wood, both of Hammerfield Lodge, Hammerfield Avenue, Aberdeen. Secretary: George R. Wood. Registered office: North Esplanade East, Aberdeen.

Increases of Capital

NORTHERN COASTERS, LTD., shipowners, etc., Proctor House, Newcastle-on-Tyne, 1.—Increased by £500, in £1 ordinary shares, beyond the registered capital of £10,000.

HOWARD TENENS, LTD., agents, ship and insurance brokers, etc., Bevis Marks House, Bevis Marks, London, E.C.3.—Increased by £7,000, in £1 ordinary shares, beyond the registered capital of £23,000.

AUSTRALIND STEAM SHIPPING CO., LTD., Cunard House, 88 Leadenhall Street, London, E.C.3.—Increased by £150,000, in £10 ordinary shares, beyond the registered capital of £150,000.

HOGG, ROBINSON & CAPEL CURE, LTD., insurance brokers and shipping agents, etc., Staple Hall, Stone House Court, Bishopsgate, London, E.C.2.—Increased by £210,000, in £1 6 per cent cumulative preference shares beyond the registered capital of £30,000.

RIVER LIGHTERAGE CO., LTD., 4 Fenchurch Avenue, London, E.C.3.—Increased by £50,000, in 25,000 "A" and 25,000 "B" shares of £1, beyond the registered capital of £150,000 in 75,000 "A" and 75,000 "B" shares of £1. All the "A" shares are held by North Thames Gas Board and all the "B" by Stephenson Clarke, Ltd.

Change of Name

NEWCASTLE & SCANDINAVIAN SHIPPING CO., LTD., Exchange Buildings, Newcastle-on-Tyne,—Name changed to Wright & Company (Newcastle & Hull), Ltd., on May 2.

GULF OF SUEZ STEAMSHIP CO., LTD., 104/6 Leadenhall St., London, E.C.3.—Name changed to Maritime Transportation, Ltd., on April 6. Practically all the issued shares are held by Ellerman Lines, Ltd.

Eagle Star Insurance Co., Ltd.

Expansion in all Departments

THE annual general meeting of Eagle Star Insurance Co., Ltd., will be held at Wimborne House, 22 Arlington Street, London, S.W.1, at 12.30 p.m. on Tuesday, June 5, 1951.

The following is a summary of the statement by the chairman and managing director, Sir Brian Mountain, Bt., circulated with the accounts for the year 1950:

In the Life Department net new sums assured exceeded £43 millions, over £2¼ millions higher than 1949, again constituting a record. The expense ratio was 7.9 per cent, and the net rate of interest £3 11s. 9d. per cent. The mortality experience was particularly favourable. This continual increase in new business indicates that life assurance is pre-eminent as a means of saving, and is therefore serving the national interest by providing a countermeasure to inflationary tendencies.

The Fire Account again shows a substantial increase, with profitable results at home and overseas. The claims experience was good; the premium income exceeded £2¼ millions, and £239,000 is transferred to profit and loss.

The Accident Account (including Personal Accident and Motor) discloses an increase once again in premium income, now nearly £5 million, and £153,000 is transferred to profit and loss. In the Motor Department we have experienced rising claim costs and increasing accident frequency. Increased premiums in most classes of Motor Insurance will apply from June 1, 1951.

After transferring £100,000 to profit and loss, the Marine Fund, at £1,723,966, is 127 per cent of the increased premium income.

Net interest at £400,925 shows a small increase. Shareholders' profits from the English and Scottish Closed Fund are £49,319, and contributions from other trading departments total £492,000.

After allowing for increased taxation, both at home and overseas, contributions to the staff pension funds and other outgoings, the profit for the year is £444,523. The dividends require £309,075 and the profit and loss carry forward is £1,550,908, an increase of £147,215.

In spite of the prospects of trade expansion and improving investment income the directors have decided that, in view of the unsettled world political situation, it would be wiser to defer this year any recommendation for increased dividend.

Total assets now exceed £61¼ millions and reserves and undistributed profits are over £5,000,000.

International Shipping Federation

At the annual meeting of the International Shipping Federation, held in Paris last week, Mr. Donald F. Anderson, chairman of the British Shipping Federation, was elected chairman in succession to Mr. Basil Sanderson, who had occupied the position since 1934. The vice-presidents elected were Mr. W. N. H. van der Vorm (Holland), Cmdr. Odd I. Loennechen (Norway), and Mr. Maitland S. Pennington (United States). The decisions of the conference—which was attended by representatives of 15 nations—on seafaring conditions in Europe and Asia were not announced, but have been submitted to the meeting of the Joint Maritime Commission of the International Labour Organisation being held this week at Geneva. It was reported at the conference that the International Shipping Federation has been officially granted consultative status by the Economic and Social Council of the United Nations.

AN agreement has been signed by Czechoslovakia and Poland under which Czechoslovakia will take over part of the port of Szczecin and be given special privileges on railways running from Czechoslovakia to the port.

A REQUEST to the Swiss Parliament has been made by the Federal Council for a supplementary credit of 35 mn. francs (nearly £3,000,000) for the purpose of increasing the size of the Swiss merchant navy by 70,000 tons to 180,000 tons.

STOPPAGES IN LONDON DOCKS

Report of Committee

THE report has been published of the committee set up by the Minister of Labour, under the chairmanship of Sir Frederick Leggett, to investigate the problem of stoppages in the London Docks. The Committee's main findings and recommendations fall under five headings: the industrial background; activities of the "unofficial" group; the Dock Labour Scheme; the trade unions; and amenities. These are summarised in the report as follows:

The Industrial Background

(a) The nature of dock work is such as to provide opportunities for disputes to occur to an extent not found in other industries. In London, the outlook of the casual worker still persists, and is shown particularly in the continuance of restrictive practices, and in the tradition of unquestioning solidarity in strike action. In spite of the benefits which it confers, the obligations imposed upon dock workers by the Dock Labour Scheme have caused resentment and irritation among the men.

Activities of the "Unofficial" Group

(b) The unofficial Portworkers' Committee have taken every advantage of these circumstances with the object of disrupting the work of the port by unofficial strikes, and otherwise undermining the constitutional methods of the unions.

The Dock Labour Scheme

(c) The Dock Labour Scheme, while providing safeguards against the economic insecurity of the past, has left the organisation of employment much as it was in the days of casual labour. Moreover, the Dock Labour Board has been interposed as a third party between employers and workers, and has thus increased the impersonal nature of their relations. There is not the stable relationship between employers and workers which obtains in industry generally. The Scheme as at present operated should be regarded as only a stage towards a form of organisation which would produce more stable and direct relations between employers and workers.

(d) To this end, permanent employment should be extended as far as possible.

(e) The dual position of members of the Board who are also representatives of industrial organisations has caused difficulties, particularly in disciplinary matters where Board members have been associated with decisions against their own members. There is a lack of recognition of the joint responsibility which is inherent in joint control of the Scheme.

(f) Responsibility for discipline under the Scheme should be transferred from the Dock Labour Board to the joint industrial machinery and the present disciplinary procedure should be changed.

(g) The continuance of unofficial strikes and other unconstitutional action may compel the suspension of the Scheme in London.

(h) Individuals who persistently show themselves unwilling to observe the conditions of the Scheme or who persistently incite unconstitutional action should be dismissed from the industry and dock workers brought to realise that such disciplinary action is essential to the continuance of the Scheme.

(i) Appropriate penalties should equally be introduced for persistent breaches of the Scheme by an employer or by any agent acting on his behalf.

The Trade Unions

(j) Friction between the Transport and General Workers' Union and the National Amalgamated Stevedores and Dockers is a source of trouble, and closer unity between the two unions is desirable. The Trades Union Congress should consider whether it could help towards this end.

(k) Special measures are required and should be taken, particularly in a large trade union organisation, to retain the lively interest of the members, to encourage their participation in union activities, and to keep them fully informed of the affairs of the industry.

(l) The unions should do more to minimise unofficial action by speedy and vigorous intervention when trouble threatens and by combating the tendency to strike first and think afterwards.

Amenities

(m) Amenities for dock workers in London are totally inadequate, and this has contributed to the sourness of industrial relations in the port. Minimum legal standards in these matters should be extended, or should be established where they do not already exist.

Electrical Installation for Ships—X

THE NAVAL ARCHITECT'S VIEWPOINT—I

By H. J. D. THOMPSON

IN DESIGNING a ship, the naval architect is as much concerned to produce the maximum earning capacity, the highest standard of passenger comfort, the absence of aggravating noise, and the most economical and expeditious loading and discharge of cargo, as he is implicated in the stability, speed, safety and other important details, in order to ensure a popular and profitable liner at a minimum cost to the shipowner. The A.C. enthusiasts have given no consideration to the economic impact of their proposals on the first four secondary objectives, or to their reaction on the complete cost of the liner.

It is the normal practice in British shipyards to allocate expenditure under the following headings to the naval architect's hull costs:

(1) Deck machinery
(2) Air conditioning, heating and ventilation systems
(3) Steering gear
(4) Hospital, galley, laundry, and hotel equipment.
(5) Sound proofing to eliminate aggravating noises
(6) Machinery seatings and lifting facilities
(7) The lining of compartments

Deck Machinery

In the discussion on Fox & Coleman's paper, no less than seven propositions were advanced for A.C. winches, as follows:

(a) The expensive maximum speed system involving squirrel cage motor and D.C. generator with two special exciters
(b) Motor-generator converter set and D.C. drive—the adjustable voltage hoist control system
(c) Four-speed squirrel cage motor drive with a separate blower for forced ventilation of the motor
(d) The use of electro-magnetic couplings with the single-speed squirrel cage drive
(e) An hydraulic drive similar to the Vickers variable speed unit
(f) A multi-speed induction motor combining squirrel cage and wound rotor drive
(g) The use of electronic rectifiers.

In the past 25 years, great expectations have been periodically raised in this country of A.C. winches to compete with and even exceed the high standard of performance of the well proved D.C. winch. Unfortunately, these promises have not yet been realised, though instances have been known where A.C. winches have been removed and replaced by D.C. winches. As far as British ships are concerned, we have not yet had sufficient experience to comment on the A.C. winches which have been made in increasing numbers in the postwar years, mostly for foreign ships.

On the basis of British manufacturing costs, the seven types mentioned above would not be competitive in cost and would have inferior overall efficiencies. The virtue of D.C. dynamic braking—quick and smooth retarding—does provide a substantial saving in the wear and tear of brakes, which is usually the heaviest item in winch maintenance. This virtue, and also the light hook speed and the silent brake, cannot be introduced in a direct A.C. drive. A.C. brakes are noisy, and A.C. winches sited in the vicinity of accommodation and public rooms will require costly sound-proofing.

The loading and discharge of cargo is such an important function that a probable additional 3 to 5 per cent in cargo handling costs per annum would result from the abolition of the high light hook speed. This would prejudice the shipowner in favour of the D.C. winch.

For shipyard services, the writer strongly favours the A.C. drive with rotor control, but only because the very limited and intermittent use of the winch is not comparable to the intensive operation and continuous service on board ship. Electricity costs are almost negligible in ship construction, being less than one-tenth of 1 per cent, whereas in ship operation electricity costs may range from 7 per cent to 10 per cent of the total fuel bill on a liner.

For relative A.C. and D.C. deck machinery costs we have Mr. Clarke's guidance that A.C. deck machinery equipment costs 30 per cent more, is somewhat heavier and requires just as much maintenance as D.C. winches. Including adjustments for spare gear, the 52 drives aggregating 6,248 h.p. in a *Queen Mary* give costs which are in favour of D.C. by approximately £25,000, with a weight saving approximating to 11 tons. The corresponding rough approximations for an *Empress of Britain* (34 drives of 1,334 h.p.) are £10,500 and 3½ tons, and our 25,000-tons diesel liner (28 drives of 830 h.p.) £4,800 and 1½ tons.

Capstans and windlasses are relatively more favourable for A.C. drives than winches. As slow crawling speeds are essential, the Ward-Leonard system or an adaption of it can readily be provided from an A.C. source, but the mixing of two different supply systems for deck machinery and the increased cost of variable frequency apparatus leaves little doubt that the naval architect and the shipowner will be in agreement with Fox & Coleman and Mr. Savage in retaining direct current for deck Machinery.

Air Conditioning, Heating and Ventilating Systems

Reference was made in a previous article to the great advances made in this highly specialised subject to provide the very high standard of comfort now required for passengers and ships' personnel. In view of the importance and large expenditure, and the small consideration devoted to it by the A.C. enthusiasts, it must be examined at some length.

Certain departures would doubtless be made today from the system installed in the *Queen Mary*, where the heating of cabins on the Thermo Reg system of independent temperature control is augmented by electric radiators. The supply fans with heaters serving the 27 public rooms, cabins de luxe, theatre, cinema and hospitals would probably be incorporated in full air conditioning units, with cooling either by steam jet vacuum-type refrigerating machines requiring very big steam supplies and highly powered electrically driven centrifugal pumps, or alternatively by several medium-capacity Freon or CO_2 compressors, with a few small-capacity sets for the hospitals and public rooms not in close proximity to central positions housing many ventilation and heating units. The objective is the maintenance of, say, 10 F. dry bulb difference, with the right degree of dehumidification in the air supply between public rooms and cabins. In this analysis the statutory regulation temperature of 67 F. will be the basis.

As it is doubtful if the large amounts of steam required for the steam jet machines would be available, our analysis will be confined to air conditioning by CO_2 or Freon compressors in association with the existing 235 general ventilation fans of 1,119 h.p. and the 19 engine room fans of 388 h.p.—a total of 254 fans aggregating 1,507 h.p.

Misleading Figures

The substitution of two-speed squirrel cage motors for the D.C. drives and 415/24 volt 50-cycle single-phase transformers for the small rotary converters for thermostatic control at first sight presents an overwhelming case for A.C., with the big saving (inclusive of spare gear) of approximately £11,000. To this advantage a 90 per cent saving on D.C. maintenance, say £500 per annum, must be added. The weight saving in favour of A.C. approximates to 16½ tons. These figures, however, are gross savings and are misleading, as the following secondary effects of the use of A.C. must be considered to see the matter as a whole.

(1) For economic reasons, pressure automatic control would be installed on the A.C. system to eliminate the frequent manual adjustments on bypassing and damper control by the engineers. Short trunkings require one pressure relief valve, long straight trunkings two pressure relief valves, and long tortuous trunkings three pressure relief valves, the supply and fitting of which will average 55s. per valve. A minimum total of 480 valves will cost approximately £1,300 for the 40 miles of ventilation trunking installed in the liner. This reduces the above advantage in capital cost to £9,700.
(2) The reduction in the size of the electrical store room for spares. This is an A.C. advantage giving more ship earning revenue.
(3) Additional sound proofing will be required in ventilation trunks to reduce the magnetic hum and noise of the two-speed squirrel cage motors at top speed. This is a big D.C. advantage which will reduce the A.C. capital saving advantage to £5,000.

Items (2) and (3) will be commented on more fully under revenue earning and soundproofing.

To present an impression to the naval architect of a problem quite ignored by the A.C. enthusiasts, consideration of the quantities of air, temperature adjustment damper control and bypassing will be considered.

The 1,507 h.p. of ventilation fans, when developing full output, produces a total circulation and extraction of about 2,000,000 cu. ft. of air per minute, or the staggering figure of 98,000 tons per day. (The basis is 13.1 cu. ft. of air per lb.)

Exhaust fans for galleys, lavatories, etc., will run for the most time at full speed, but those working in conjunction with public room supply fans will have their speeds adjusted to suit the changes in atmospheric conditions. Supply fans will run at full speed only during the hot season, and if D.C.-driven will be regulated for speed reduction to an extent proportionate to declining temperatures. If A.C.-driven they will run at their lower speed in the cooler weather. A representative average annual fan load factor combining sea and harbour time and a lay up for overhauls is 45 per cent on the Atlantic route, and 60 per cent is a safe basis for Far East routes.

Thus a *Queen Mary* has an average circulation through the trunks approximating to 31 tons blown or extracted per minute. At certain speeds with D.C. drives there is a very small percentage of bypassing of heated air, but with the limitations of two-speed A.C. fans there will be substantially greater amounts of bypassing. The smaller D.C. fans (fractional to 1 b.h.p. motors), with their three-speed regulators by series resistance, are less efficient than the two-speed A.C. fans of this range, but they are limited to 5 per cent in number and to less than 1 per cent in power of the complete fan system.

Four-Speed Motors Needed

The output of the fans, like that of the compressors, is determined by maximum conditions of heat, and the volume of air supplied in the coldest of weather is effected on D.C. drives with speed regulation reductions of from $\frac{1}{4}$ to $\frac{3}{4}$ of maximum r.p.m. Thus four-speed A.C. motors should be installed to approach D.C. flexibility; unfortunately their cost would exceed that of D.C., and their reliability has yet to be proved by extended experience. Speed reduction is a very great power saving and speed control is more efficient than throttling at constant speed. The Ministry of Fuel and Power, in their *Fuel Bulletin* No. 13, strongly recommended industrial consumers to give this their close attention in the interests of fuel conservation.

With free discharge, the power of centrifugal fans, like pumps, varies with the cube of the speed. Where the output is throttled by dampers the power varies with the square of the speed. If by opening the dampers the required output can be obtained with a 10 per cent speed reduction there will be a power saving of 19 per cent, but if the unthrottled fan is running 10 per cent too fast and is reduced 10 per cent the power saving then amounts to 27 per cent—an additional 8 per cent higher efficiency.

An 8 per cent economy on the 180 fans (constant exhaust and small fans excluded), aggregating 1,250 h.p. at 45 per cent load factor, gives the D.C. power running costs an advantage of £460 per annum with electricity at $\frac{3}{4}$d. per unit for the six cool months of the year. Deducting the greater efficiency of the small A.C. fans there is a net saving with D.C. fans of £450 per annum, which is an understatement rather than an overstatement.

Air Conditioning Compressors

Air cooling compressors will have to be installed of a capacity to deal with New York temperatures in the sun, say 115 deg. F., and thus the broadest range of volumetric control is essential. Ruling out the A.C. commutator motor, the four-speed squirrel cage motor and the single-speed squirrel cage slip clutch combination as too costly, the slip ring motor with specially finely graded control gives an advantage in cost over the D.C. drive of only 5 per cent.

Further considerations of an average annual loading on the compressors during running conditions of probably not more than $\frac{1}{4}$ load, with frequent operations of $\frac{1}{4}$ load, resulting in such poor power factors as 0.5 and 0.4 lagging, make it most desirable in the interests of sound engineering to install capacitors to bring the power factor to 0.8 lagging on the lower loading. On peak loadings in extreme heat there will be slight leading power factor neutralised at the sub-switchboard busbars, which will give an improved overall, but still a lagging, power factor. This remote injection is not ideal, but is much to be preferred to leaving power factors of 0.4 and 0.5 uncorrected.

Assuming, in the interest of interchangeability and minimum spare gear costs, that ten 375,000 B.Th.U. compressors with 80 h.p. Freon machines or 100 h.p. CO_2 machines are a fair proposition to install for air conditioning, as limited to our previous remarks, each compressor will require either a 25 K.V.A.r capacitor (Freon) or a 30 K.V.A.r capacitor (CO_2). The cost of erection, transportation, switchgear and cabling approximates to £4 per K.V.A.r, and the £100 or £120 additional cost to A.C. results in the D.C. equipment being the cheaper by £60 and £80 respectively per set. The already reduced margin in favour of A.C., at £5,000 is thus still further reduced to £4,600 (Freon) and £4,200 (CO_2) respectively. Weight saving is in favour of D.C. by 9 cwt. per set.

No doubt air conditioning specialists, with their close investigations of structural losses, lighting, body, fan and sun radiation heat gains, would modify the numbers and capacities of the above compressors, perhaps by making provision for small automatic independent units for the hospitals and a larger unit for the huge main restaurant of 240,000 cu. ft. Our uniform proposition, however, simplifies calculations, and affords us a reasonably close guidance on running costs. Fox & Coleman advance an installed h.p. of 600 for their 30,000-tons liner.

Compressor Running Costs

An accurate figure for this cannot be advanced, as continuous daily logged data for a three-years period of fan and compressor loadings, periods of running and shut down, and temperature variations per day would be required. It will be assumed that the compressors are pumping for 2,000 hours only per annum, i.e. less than 25 per cent of sea and harbour time, but exclusive of lay-up for annual overhaul, with the following loadings, which are representative.

2 per cent, i.e. 40 hours only, in extreme heat at full load.
8 per cent, i.e. 160 hours only, in full summer heat at $\frac{3}{4}$ load.
30 per cent, i.e. 600 hours only, in moderate heat at $\frac{1}{2}$ load.
60 per cent, i.e. 1,200 hours only, in slight heat at $\frac{1}{4}$ load.

With electricity at $\frac{3}{4}$d. per unit the compressor power savings with the D.C. drive would amount to £265 (Freon) and £330 (CO_2) per annum.

Bypassing of Heated Air

Since A.C. has, fortunately in the writer's opinion, not yet commended itself to the owners of large passenger liners, no data is available to ascertain the extent of bypassing and heat wastage with two-speed fans. It will be assumed that representative figures for the Atlantic route are as follows:

Average ambient temperature for four summer months 75 deg. F.
Average ambient temperature for seven cooler months 54 deg. F.

According to Kemp, the heating of air costs three times as much as the movement for a 15 deg. F. rise (69 deg.—54 deg.) and it is generally accepted that the minimum cost of cooling air is six times the cost of heating air for equal difference in temperature.

On the above basis, every 1 per cent of unnecessary heated air bypassed costs £340 per annum. The writer suggests that with the limitations of two speeds, the A.C. fans will bypass a minimum of 5 per cent more than the very small quantities that the flexible D.C. drive does, and that £1,720 is not an exaggerated amount of the cost of the wasted heat with A.C. equipment. It would be most interesting and helpful to have this figure criticised or confirmed by air conditioning experts.

Summary of Analysis

This analysis can be summarised as follows:

A.C. capital costs on fan motors control gear and spares		£11,000
Reductions for :		
(1) Fitting pressure automatic control		£1,300
(2) Additional sound proofing (basis given in article XI)		£4,700
(3) Extra A.C. cost on compressor electrics		£600
	alternatively	£800
Total		£6,600
	alternatively	£6,800
Net A.C. advantage in capital cost		£4,400
	alternatively	£4,200

It must be remarked here that the power factor on the A.C. equipment in the cool weather will be very poor, probably little more than 0.55 lagging, a position which would not be left uncorrected by the A.C. enthusiasts if they were operating land installations. "No Lag" motors are not suitable for this service, and would reverse the position respecting capital costs. If instructed to fit the two-speed A.C. motors, the writer would in the interests of sound running conditions install capacitors at the distribution boards serving groups of fan motors, and believes the

majority of electrical engineers would be of this opinion.

This would involve 300 K.V.A.r costing £1,200, reducing the net savings in capital costs to £3,200 and £3,000 respectively, and the weight reduction in favour of A.C. to less than 5 tons. This further improvement will not be contained in the summary which can now be given.

Running Costs and Maintenance

Saving in A.C. maintenance per annum (£550 — £50)	£500
Saving in D.C. compressors running per annum	£365 or £330
Saving in D.C. fan motors running per annum	£460
Saving in D.C. heating of the 5 per cent of air bypassed	£1,720
Net *D.C. savings in running costs per annum*	£1,945 or £2,010

Thus the D.C. proposition is the more economic after 2¼ years' service, with 5 per cent bypassing of heated air. It is unthinkable that the wastage could be less than 2½ per cent, and even on this basis the D.C. installation wipes out its additional capital cost after four years and one month's service. The weight still favours A.C., though the original 16½ tons is reduced by pressure automatic control, additional sound proofing, capacitors, and seatings to rather over 7 tons.

For an *Empress of Britain* the D.C. equipment requires 3½ years and for the 25,000-tons diesel liner four years to wipe out the A.C. savings in capital costs. Weights favour A.C. by approximately 4½ and 2¾ tons respectively. Fox & Coleman, Mr. Savage and many A.C. enthusiasts wisely conceded the boiler forced draught fans to the D.C. allocation, and it seems illogical to the writer that a similar concession should not be made for the ship ventilation fans.

The *Queen Mary's* 36 forced draught fans, aggregating about 3,000 h.p., provide on full duty 600,000,000 cu. ft. of air per day, i.e. approximately 20,400 tons, but are only running somewhat longer than the steaming hours per annum, whereas the ventilation and heating system is in operation not only in sea and harbour time, but to some degree during the month's lay up for overhaul. The function is the same; numbers, horse power, frequency of speed adjustment, and running hours vary, and logic compels us to allocate both systems to D.C. in the economic interests of the naval architect and shipowner.

Clyde Ports Centralisation Opposed

Opposition is almost unanimous in Glasgow to the scheme proposed by the British Transport Commission for the unification of docks and harbours on the Clyde. At a recent meeting of the Clyde Navigation Trustees, the right to oppose the scheme was approved. The need for change was questioned, and the Docks & Inland Waterways Executive was criticised on the grounds of having failed to consult with the Trust. The proposed constitution was also criticised, as was the lack of full local autonomy. In effect, the decision of the Trust registers the disapproval of the City of Glasgow of an alteration in the existing system of control. The Town Council of Glasgow has also agreed to oppose the new scheme, mainly on account of the serious reduction in the Council's representation on the Trust which would ensue, thereby limiting the degree of control which the city can exercise in its own affairs.

DEVELOPMENT SCHEME FOR HARTLEPOOLS

Accommodation for Larger Ships

A SCHEME to improve Hartlepools docks at an estimated cost of £330,000 has been announced by Mr. T. S. Roberts, docks manager at Middlesbrough and Hartlepools. The scheme is to be undertaken by the Docks & Inland Waterways Executive with the approval of the British Transport Commission, and involves the reconstruction of the lightening berth at the old harbour. A major disability at the port, which has become more and more apparent in recent years, is the lack of berthage accommodation for the vessels of 10,000 tons to 12,000 tons deadweight which are being increasingly employed in the two trades which concern the Hartlepools most—timber and iron ore imports.

As regards timber, the trend in recent years has been for imports from Canada to increase, and vessels of up to 12,000 tons are generally employed. There is also a developing trade from West Africa in hardwood logs and the timber vessels, while not so large as those in the Canadian trade, are too deep draughted to be received at the Hartlepools except on the most favourable tides. As regards iron ore, the South Durham Steel Works would make greater use of the Hartlepools for their imports if suitable accommodation were available.

Reconstructing Berth in Old Harbour

It was decided that the present difficulties could be overcome by reconstructing the lightening berth in the old harbour which is now in a delapidated condition, and Mr. Roberts, in conjunction with Mr. W. MacKenzie, the Executive's chief engineer for docks, consulted the Hartlepools Docks Advisory Committee, which consists of the shipowners, importers, exporters, Chamber of Commerce and trades unions, and the scheme was evolved.

The existing berth is of timber and is 400 ft. in length with a depth of water alongside at 24 ft. at L.W.O.S.T., thus accommodating vessels of 22½ ft. draught. The length of the quay is inadequate for vessels in the Canadian trade and the draught of such vessels is up to 28 ft. The berth is equipped with two electric fixed-jib quay cranes of 45 ft. radius, which are also inadequate for modern vessels and there are only two railway lines within plumb of the cranes.

The new scheme provides for the reconstruction of the quay in reinforced concrete, and its lengthening from 400 ft. to 680 ft.; dredging to provide a depth of 29 ft. 6 in. at L.W.O.S.T. for 570 ft. of the quay, thus permitting a vessel of 28 ft. draught to berth alongside and remain afloat on any tide; the widening of the quay to 82 ft. at the western end, tapering to 66 ft. at the eastern end; and the construction of six railway lines for the full length of the berth.

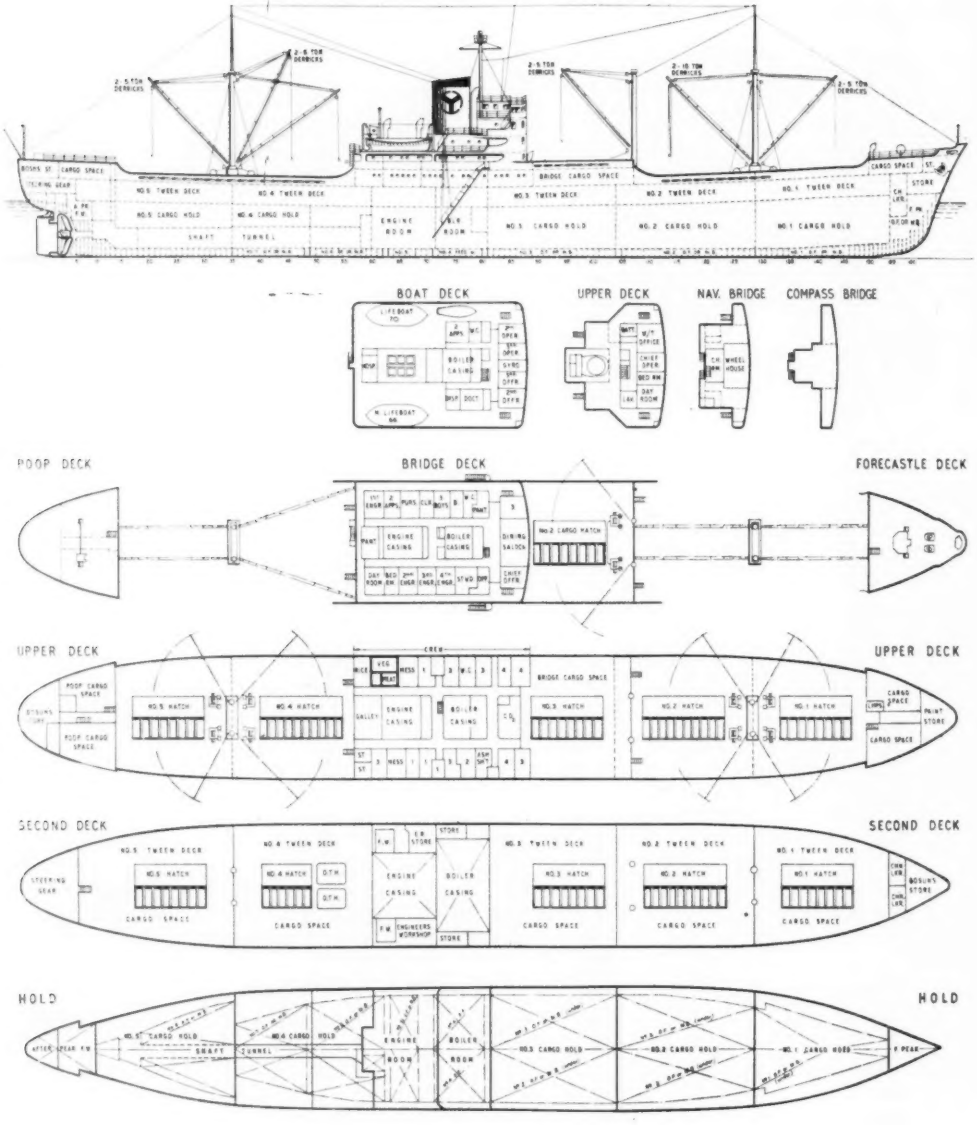
Five electric level luffing portal quay cranes on a gauge of 15 ft., with a working radius of 70 ft., will be provided. Four will have a lifting capacity of 7½ tons, and one 10 tons.

It has been agreed between shipowners, importers and trades unions that the berth will be used primarily for deep-draughted vessels which can afterwards proceed to the enclosed docks to finish discharging, but in so far as the berth is available it will be used for the complete discharging of vessels.

Gold Medal for Design of "Ocean Monarch"

The award of a gold medal "for outstanding beauty and unusual design features of a cruise ship" has been made by the Academy of Designing in the United States to the Furness, Withy cruising liner "Ocean Monarch," built at the Naval yard of Vickers-Armstrongs, Ltd., Newcastle-on-Tyne. In this photograph the ship is seen arriving at New York on her maiden voyage

GENERAL ARRANGEMENT OF THE JAPANESE CARGO LINER "YAMASHITA MARU"



BUILT BY URAGA DOCKYARD CO., LTD., FOR YAMASHITA NISEN K.K.

THE "YAMASHITA MARU"

A JAPANESE CARGO SHIP WITH GEARED STEAM TURBINES

THE *Yamashita Maru* is a typical example of the several medium-speed cargo liners recently completed in Japanese shipyards. She was built by the Uraga Dock Co., Ltd., for the Yamashita Kisen K.K. to the requirements of classification A1, (E), AMS and EAC of the American Bureau of Shipping and NS* and MNS of the Nippon Kaiji Kyokai. As may be seen from the accompanying drawing, she is a single-screw, two deck full-scantling vessel with poop, bridge and forecastle erections, all of these spaces being available for cargo except the after half of the bridge which accommodates the crew. She has a raked and curved stem, of rounded plate construction, and a cruiser stern. The principal particulars of the vessel are as follows:—

Length overall	137 m. (450 ft.)
Length between perpendiculars	128 m. (420 ft.)
Breadth moulded	17.8 m. (58.3 ft.)
Depth moulded	10 m. (32.8 ft.)
Loaded draught	7.954 m. (26.2 ft.)
Block coefficient	0.721
Prismatic coefficient	0.733
Midship area coefficient	0.984
Loaded displacement	13,447 m. tons (13,250 tons)
Deadweight	9,570 m. tons (9,400 tons)
Cargo capacity, grain	14,134 cu. m. (500,000 cu. ft.)
Cargo capacity, bale	13,016 cu. m. (460,000 cu. ft.)
Fuel oil capacity	1,443 m. tons (1,420 tons)
Feed water capacity	120 m. tons (118 tons)
Fresh water capacity	188 m. tons (185 tons)
Gross tonnage	6,294
Net tonnage	3,671
Service speed	13.25 knots
Trial speed at half load	16.10 knots at service power
Propelling machinery	One set of double reduction geared impulse turbines developing 4,000 s.h.p. at 98 r.p.m. and driving screw.

The propelling machinery space has the forward bulkhead of the boiler room almost at the mid-length, so that the machinery installation is all abaft midships. The fore part is divided into three holds, and the after part into two main holds, but No. 4 hold is subdivided to provide deep oil tanks abaft the engine room.

As may be seen from the ship particulars given, the cubic capacity (grain) per ton deadweight is 53.2 cu. ft. and this, together with the choice of the three-islander two-deck type instead of the more common open shelterdecker, would indicate that the vessel will be of particular advantage for the heavier cargoes. The hatchways are large enough to make the vessel an easy trimmer, Nos. 1, 3 and 5 being 34.2 ft. in length, and Nos. 2 and 4 39.4 ft. in length. No. 3 hold is served through a hatchway in the bridge deck, all other holds having hatchways in the upper deck. No. 4 hatchway in the second deck is shorter than in the upper deck to allow for two oil-tight hatchways into No. 4 deep tank. There are two 5-tons derricks at each cargo hatchway, except No. 2, where two 10-tons derricks are fitted. The winches are steam-driven and comprise ten 8 to 12 in. winches each capable of lifting 5 tons at 100 ft. per min. at the masts and bridge deck derrick posts, and one 8 by 12 in. steam warping winch on the poop deck. The windlass is a steam-driven unit with cylinders 11 by 12 in.

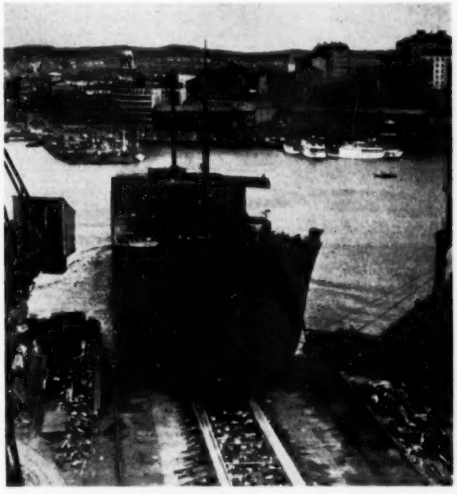
The steering gear, which operates a streamlined rudder of the semi-balanced type, is of the Hele-Shaw hydro-electric type and is fitted with a Uraga telemotor system. The refrigerating machinery which serves the cold stores in the port side of the bridge aft is of the methyl-chloride type, powered by a 7.5 h.p. compressor. A Lux-Rich fire detecting and extinguishing system has been installed throughout the cargo spaces. Only two lifeboats are fitted, one of the oared type for 70 persons and the other a motor-propelled type seating 66 persons. A small working dinghy is also provided. The navigation equipment includes four transmitters and four receivers, one of each being for emergency use, three magnetic compasses, a gyro compass, electric sounding machine, electric log, echo sounder and direction finder.

All accommodation is amidships, the deck and engineroom crew being located in the bridge; engineer officers, chief officer, apprentices and stewards in the bridge deckhouse; and other deck officers, wireless operators, doctor and apprentices in the boat deckhouse. The captain's suite is in the house on the upper bridge deck. The total complement comprises the master, 19 officers, and 38 crew, while a room for two passengers is also provided, making a total of 60 persons.

The propelling machinery comprises one set of double-reduction geared impulse steam turbines, with a normal power of 4,000 s.h.p. at 98 r.p.m. Steam at 320 lb. per sq. in. is provided from two three-drum watertube boilers which are oil fired. A donkey boiler providing steam at 230 lb. per sq. in. is also installed. There are three generators, two with an output of 180 kVA each at 225 volts, and one of 60 kVA at 225 volts.

THE whaling factory ships *Southern Harvester* and *Southern Venturer* are again to be refitted this year by the Middle Docks & Engineering Co., Ltd., South Shields. They are expected in August.

THE Middle Docks & Engineering Co., Ltd., South Shields, has received contracts for overhauling the tankers *Castle Woods* and *Drapers Meadow*. At present flying the Panamanian flag, the vessels are being taken over by the Overseas Tankship Corporation (United Kingdom), Ltd.



Launch of the Tanker "Margaret Onstad"

The launching ceremony took place on May 9 at the yard of A B Gotaverken, Gothenburg, of the single-screw motor tanker *Margaret Onstad*. Building for Skibs A S Alse, of Oslo, she is one of the largest ships built in Scandinavia, having a gross tonnage of about 14,900 and a deadweight capacity of about 23,400 tons on a mean draught to summer freeboard of 31 ft. 11 in. Her principal dimensions are 593 ft. 6 in. length o.a., 560 ft. b.p., 74 ft. 6 in. breadth moulded and 42 ft. 3 in. depth moulded. When completed, cargo oil will be carried in 10 centre and 12 wing tanks with a total capacity of 1,046,500 cu. ft. The two main pump rooms will have a total pumping capacity of 1,200 tons per hour. A dry cargo hold is arranged forward with a grain capacity of 63,700 cu. ft. The propelling machinery is to be supplied and installed by the shipbuilders and comprises a 9-cylinder diesel engine of the two-stroke single-acting type. The engine, developing 10,000 i.h.p. at 112 r.p.m., will provide the vessel with a fully loaded speed of 14½ knots

COMBINED TOWING AND SURVEY LAUNCH

DESIGN OF A SMALL CRAFT FOR SPECIAL DUTIES

THE 36-ft. combined towing and survey launch *Russell Paul* has recently entered the service of the Ipswich Dock Commission. Propelled by a 65 h.p. Dorman diesel engine, she was built by Whisstock's Boatyard, Ferry Quay, Woodbridge, Suffolk, to the design of J. Francis Jones, Assoc. I.N.A., of Waldringfield, Suffolk.

The design of this launch was commissioned with the object of producing an easily handled and fairly powerful launch which would serve in a variety of capacities within the precincts of the port of Ipswich.

Towing Lighters and Small Coasters

Her chief work will be the towing of lighters and small coasters in the dock area, and up and down the River Orwell, with her service as a survey launch as an almost equal requirement. This required a boat of sustained quite low speeds, with very light draught (when compared with a normal towing launch) and with all-round views, totally unobstructed, for the two surveyors working over the oscillator positions just forward of the wheelhouse. The third need was for a general-purpose launch for the officials of the Commission to use in the Orwell, where general work-boat services, buoy carrying, etc., was in mind.

In view of the considerable wear and tear expected, and the long life required, it was originally decided that the hull should be of teak, and the underwater fittings all of aluminium bronze. The teak was not granted by the Admiralty, and Iroko has been used for the planking instead. An additional object of the design was to keep the weight of the boat down, so that she can be picked out of the water by two 5-ton dockside cranes for maintenance purposes.

From a design point of view the two main difficulties were to keep weight and draught within the limits imposed, and to produce a boat at the same time capable of towing the 800-tons barges, etc., and of working at the low speeds called for in survey work. The propeller finally decided on was designed to give as good an overall service as possible in these conditions. Service conditions will show the extent to which the engine can idle for very slow speeds (1 knot) and it may be found advisable in the light of such experience to have an alternative propeller for such work.

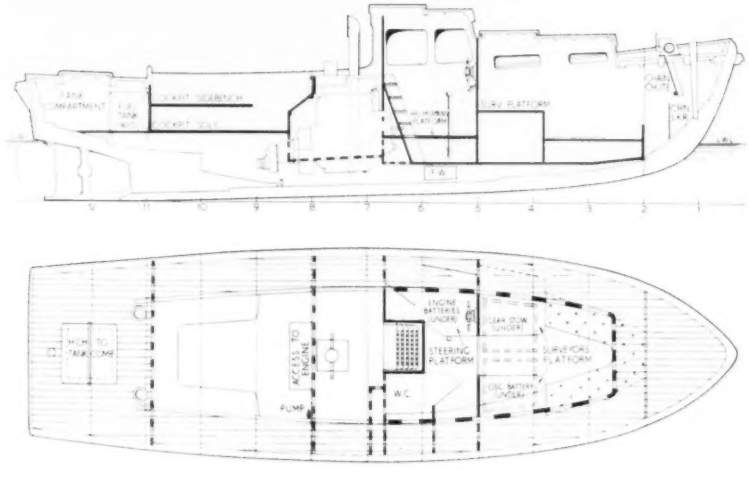
The principal particulars of the *Russell Paul* are as follows:—

Length overall	36 ft.
Length on waterline	33 ft. 6 in.
Beam	10 ft. 9.25 in.
Draught	3 ft.
Speed, towing	4.5 to 6 knots
Speed, solo	9 knots

The construction is generally in excess of Lloyd's Register requirements, the planking consisting of $1\frac{3}{8}$-in. Iroko on 2 in. x $1\frac{3}{8}$ in. rock elm steamed frames to 6-in. centres. The keel, stem, sternpost and assembly, beams and lodging knees

Left: **The completed launch**

Below: **Sectional elevation and plan**



are of English oak. The engine bearers are of English oak with pine tops and 4 in. x 4 in. angle beds, with ⅜-in. mild steel intercostals on oak pads and floors. Stringers and shelves are of larch, and the decking of rift-sawn Oregon pine. The deckhouse and wheelhouse, etc., is all 1½-in. mahogany with Iroko framing, etc., and canvased pine roofs. The rubbing strakes are of elm. The whole structure was double-soaked in "Cuprinol" before assembly.

To cover the special requirements of survey work, the hull was strengthened and padded for the installation of oscillators, and special arrangements were provided for the batteries for the echo sounding gear. Two built-up platforms were arranged to give the two surveyors an all-round view above the wheelhouse, etc., immediately over the oscillators, through twin hatches. Room for the installation of the recorders, etc., is provided on the forward cabin bulkhead, forward of which is the chain locker. Immediately abaft this are all-round seats with rexine-covered cushions (which would ordinarily be extended further aft in way of the existing survey platforms). The wheelhouse is so arranged as to have steering platforms to port, with engine controls to hand and main batteries under; and a small toilet to starboard. Lockers, etc., are worked under side decks as required. The engine is located under the bridge deck, with towing bollard on twin beams tied to ship's side and the lower stringers. These beams are reinforced with 4-in. angle steel, and so arranged that they may be unshipped to permit removal of engine. The 8-ft. cockpit is arranged for the carrying of buoys, etc., if necessary, and is heavily beamed and with 2-in. larch coamings capped with half-round galvanised steel strip. Abaft the cockpit is the tank compartment and steering gear, reached through a heavy hatch abaft the towing bar at the after end of the cockpit (which is extended across the ship by removable irons to the rails).

The launch is propelled by a Dorman type 4DLM III diesel, having four cylinders and developing 65 horsepower, governed to a four-bladed nickel-aluminium bronze propeller of 30 in. diameter. The engine controls are taken to the wheelhouse steering position. The fuel tank capacity is 50 gallons. The stern gear is all of aluminium bronze, with forged rudder stock and cast heel brackets, etc. The shaft has a diameter of 2¼ in. and is of aluminium bronze, supplied by the Manganese Bronze & Brass Co., Ltd., with rubber bearing in bracket and Tufnol plastic bearings in external gland. The propeller and stern gear was supplied by Bruntons (Sudbury) Ltd., Sudbury, Suffolk.

ROUND THE SHIPYARDS

Work in Progress in Scotland

By THE SHIPPING WORLD'S Own Correspondent

SCOTTISH shipyards continue to take a great deal of fresh business, the April and May bookings showing an increased tempo rather than any decrease. One estimate of the Clyde bookings alone for this year to date, stands at 39 oil tankers, of 642,500 tons d.w., 26 large cargo vessels of 305,800 tons d.w., two passenger liners and one hospital ship of 60,000 tons gross, and some 30 smaller units amounting in all to around 20,000 tons. It is impossible to give any accurate assessment of value, and even tonnages may be out of date by the time these figures appear; but a conservative figure might be in the region of £60,000,000 worth of new business taken by Clyde yards alone since the start of the year.

Admitting that the Clyde has taken the bulk of the new Scottish business, it is still true that the Forth, Dundee and Aberdeen have booked substantially as well. When their figures are added, the total of new business is possibly the largest ever recorded in a similar period in Scottish shipbuilding experience. Even yet there are many unconfirmed orders and inquiries in circulation, suggesting that the volume of new business is not by any means worked out.

Ore Carriers Ordered

The Fairfield Shipbuilding & Engineering Co., Ltd., has booked four ore carriers for the Liberian Navigation Corporation, each of 22,400 tons d.w., the order totalling around £5,000,000 in value. This is possibly the largest single order placed in any one yard by one owner in recent months, although it is obviously not so large as the more widely dispersed tanker contracts placed by the big oil interests. These four ore carriers are similar to two carriers already ordered by the same owners from Fairfield, making their order six carriers in all.

Tanker orders placed in May include two with the Port Glasgow yard of Lithgows, Ltd. They are to build an 18,000-tons d.w. tanker for A. F. Klaveness & Co., of Oslo, and a similar tanker for United Whalers, Ltd., of London. This tanker order brings up to 13 the number of new ships ordered from Lithgows since the start of the year, of which ten are tankers. Harland & Wolff, Ltd., Govan, have also announced tanker orders—one for an 18,000-tons d.w. tanker for Oslo owners.

Of particular importance in the past month has been the flow of orders to the smaller yards. One disturbing feature of the boom in shipbuilding had been the unbalanced nature of the business, with too many tankers and liners and not enough small specialised craft, regarding the situation from the viewpoint of the smaller yards. That situation has been adjusted by the placing of a considerable number of orders for smaller units, coasters, dredgers, cross-Channel service vessels and similar craft. Irish owners are included in the number of bookings, but British coasting companies have also shown a definite revival of interest in new tonnage.

In Greenock, George Brown & Co. (Marine), Ltd., are to build a small coaster for an associate of Coast Lines, Ltd. In Port Glasgow, James Lamont & Co., Ltd., have booked a coaster of 1,350 tons for British owners. The Ardrossan Dockyard Co., Ltd., has also booked an order for a 1,000-tons motor coaster for Coast Lines, as well as a small coaster for Dublin owners.

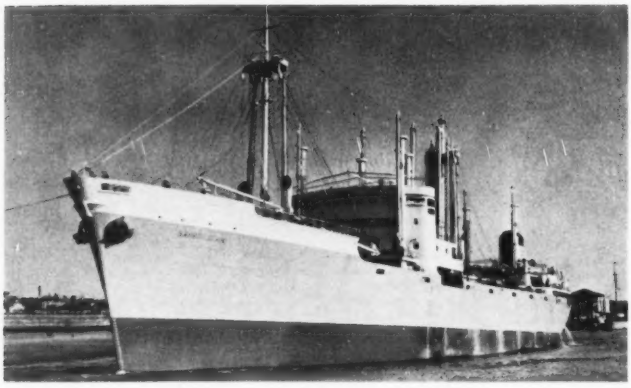
New Marine Engineering Business

In the marine engineering field there has also been a welcome influx of new business. While builders are in some instances supplying the propelling machinery for the new orders, all the main marine engineering shops have reported substantial additions to their orders. British Polar Engines, Ltd., of Govan, have done particularly well as a result of the volume of new smaller tonnage business, and are booked to supply engines for many of these new ships.

One of the best known firms, John G. Kincaid & Co., Ltd., have just announced that they will take over a factory to be built at Greenock alongside their present plant, and will employ an additional 300 men on welding and smithy prefabrication work. This development stems from the very large volume of new business on hand, which the firm estimates will carry them into 1954. Other Clyde marine engineering shops are also expanding to meet the inflow of business, which for them is equally exacting and equally welcome.

It is particularly pleasant to be able to report that work is moving smoothly in all the Scottish areas. There are admitted problems in particular areas, but the overall picture is one of smooth and efficient production, with full cooperation from the labour force. The possibility of steel shortages is very much in mind, and may have the effect of curtailing production to some extent in some yards at a later date. So far, yards are apparently managing to continue in full production since no clamour has been raised, as it would have been, had steel been unobtainable to the extent of stopping work.

THE first launch at Berwick in 80 years has taken place with the entry into the water of the 80-tons welded barge *Naughton* from the yard of William Weatherhead & Sons, Ltd., who resumed shipbuilding some time ago. The *Naughton* is intended for the London & Rochester Trading Co., Ltd. The yard has on order a tug for the Gulf of Aden and three barges.

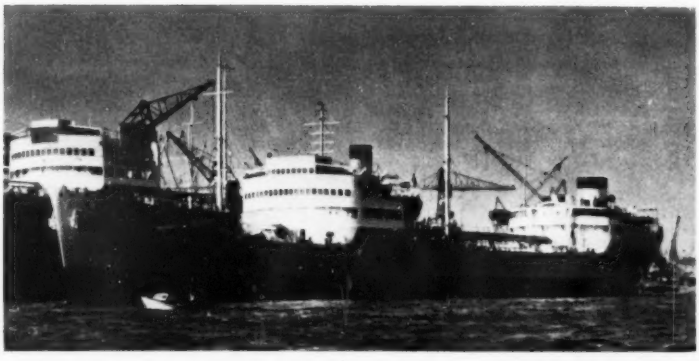


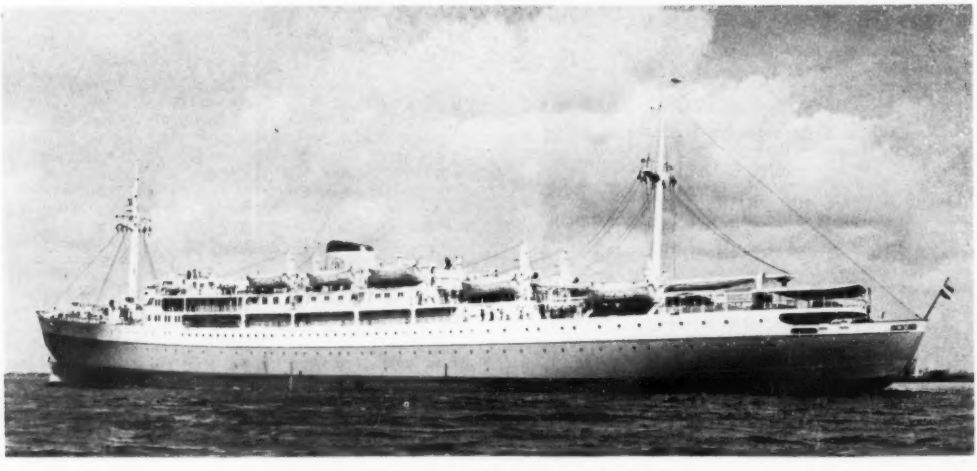
Cargo Motorship "Saint-Jean"

Built at St. Nazaire by S.A. des Chantiers et Ateliers de St. Nazaire (Penhoet), the twin-screw cargo motorship *Saint-Jean* has entered the African service of her owners, Societe Navale de l'Ouest. Of about 6,000 tons gross, she has a deadweight capacity of 6,625 tons on a draught of 23.2 ft. Her principal dimensions are 435.7 ft. length o.a., 401.3 ft. b.p., 62.3 ft. breadth and 37.6 ft. depth to shelter deck. The *Saint-Jean* is of the shelterdeck type with two complete decks. The cargo holds are well served by fourteen 5-ton and six 10-ton derricks, with a 40-ton derrick fitted for the heavy lifts. In addition to the general cargo capacity of 12,700 cu. m., there is 160 cu. m. of refrigerated space. Her twin screws are driven by six M.A.N. diesel engines through electro-magnetic couplings. These engines were supplied by Soc. Generale de Construction Mecanique, La Courneuve, four of the units developing 1,550 h.p. each and the other two each developing 1,050 h.p. The total output with four engines is 6,200 h.p., and with six 8,300 h.p.

Norwegian Tanker "Ruth"

The delivery has taken place of the single-screw motor tanker *Ruth*, built by A B Gotaverken, Gothenburg, for Rederi A S Ruth (Hagb. Waage), of Oslo. The vessel is of normal tanker design with a gross tonnage of 9,950 and a deadweight capacity of 15,860 tons on a draught of 29 ft. 7 in. Her principal dimensions are 515 ft. 2 in. length o.a., 64 ft. breadth moulded and 38 ft. 2 in. depth moulded. A loaded speed of 14½ knots is maintained by an 8-cylinder two-stroke single-acting diesel engine. Supplied by the shipbuilders, the main engine develops 7,350 i.h.p. at 112 r.p.m.





Passenger and Cargo Motorship for Argentina

The twin-screw passenger and cargo motorship *Yapeyu* has been completed for Flota Argentina de Navegacion d'Ultramar, Buenos Aires, by C. Van der Giessen en Zonen's Scheepswerven, Krimpen a d Ijssel. She is the first of three sister ships specially designed for the carriage of emigrants from Europe to the Argentine and tourists on the return voyage. She is of 11,540 tons gross and has a deadweight capacity of about 7,800 tons on a draught of 25 ft. 11 in. Her overall length is 523 ft., b.p. 480 ft., breadth moulded 64 ft., and she has a depth to C deck of 46 ft. 6 in. Supplied by Werkspoor N.V., Amsterdam, the main engines comprise two 10-cylinder two-stroke single-acting Sulzer-type diesel engines. These engines develop a total of 10,000 b.h.p. at 150 r.p.m., and provide the ship with a service speed of 18 knots

NEW CONTRACTS

Yards in Great Britain and Northern Ireland

Shipowners	No. of Ships	Type	Approximate Tonnages Gross	Deadweight	Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
Coast Lines	1	Cargo coaster	—	1,000	—	—	8-cyl. diesel	1,330	British Polar Engines	Ardrossan Dockyard
United British S.S. Co.	1	Cargo	—	10,900	—	12-12.5	Harland-B. & W. diesel	—	John G. Kincaid	Bartram
United British S.S. Co.	1	Cargo	—	10,000	—	12-12.5	Harland-B. & W. diesel	—	John G. Kincaid	Short Bros.
Boston Deep Sea Fishing & Ice Co.	2	Trawlers	450 (each)	—	—	—	Diesel	—	—	Cochrane & Sons
London & Rochester Trading Co.	2	Thames swim barges	—	220 (each)	86 × 21 × 8.5	—	—	—	—	Clelands (Successors)
American oil company	1	Oil barge	—	240	86.5 × 24 × 6	—	—	—	—	Clelands (Successors)
S. African Rlys.	1	Pilot tug	200 (disp.)		—	9	Sin.-scr. steam	290	—	W. J. Yarwood & Sons
Iron Ore Co. of Canada	1	Ore carrier	—	30,000	—	—	Sin.-scr. geared turbine	—	Wallsend Slipway & Eng.	Swan, Hunter & Wigham Richardson, Wallsend
Iron Ore Co. of Canada	1	Ore carrier	—	30,000	—	—	Sin.-scr. geared turbine	—	Richardsons, Westgarth & Co.	Furness S.B.
Elder Dempster Lines	1	Cargo	—	10,000	425 × 60	—	Doxford diesel	2,800	Shipbuilders	Scotts' S.B.
South Eastern Gas Board	1	" Flatiron " collier	—	2,825	—	—	Diesel	1,150	British Polar Engines	Burntisland S.B.
J. A. Cosmas, San Francisco	1	Cargo	—	10,950	—	—	Doxford diesel	—	—	Bartram & Sons
J. A. Cosmas, San Francisco	1	Cargo	—	10,700	—	—	Doxford diesel	—	—	Bartram & Sons
Commonwealth and Foreign Yards										
Great Lakes S.S. Co.	1	Cargo	—	—	643 (long)	—	—	—	—	Defoe S.B. Co., Bay City, Mich.
Atlas Levante Linie, Bremen	1	Cargo	2,700	5,000	341.2 × 51.8	—	Sin.-scr. M.A.N. diesels	2,400	—	A. G. Weser, Bremerhaven
Olsen Tankrederi A/S, Oslo	1	Tanker	12,000	18,000	—	15	M.A.N. diesel	—	—	Deutsche Werft, Hamburg
Deutsche Bundesbahn, Lubeck	1	Train ferry	4,000	—	443 × 56.6 × 14.1	17	M.A.N. diesel	—	—	Howaldtswerke, Kiel
Rederi A/B Ragne, Vastervik	1	Cargo	—	2,850	—	—	—	—	—	Lubecker Masch.-Ges.
Egon Oldendorff, Lubeck	1	Cargo	2,500	4,200	347.8 × 48.6	—	M.A.N. diesel	—	—	Lubecker Masch.-Ges.

LAUNCHES

Yards in Great Britain and Northern Ireland

Date	Shipowners	Ship's Name and/or Yard No.	Type	Approximate Tonnages Gross	Deadweight	Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
Apr. 25	Admiralty	*St. Giles* (754)	Grab hopper dredger	550	—	—	—	—	—	—	Fleming & Ferguson
May 10	Anglo-Saxon	*Kluang* (765)	Tanker	300	250	141.3 × 24.5	—	Diesel	425	Crossley Bros.	Camper & Nicholsons
May 16	Anglo-Saxon	—	Two oil barges	—	—	—	—	—	—	—	Clelands (Successors)

TRIAL TRIPS

Yards in Great Britain and Northern Ireland

Date	Shipowners	Ship's Name and/or Yard No.	Type	Approximate Tonnages Gross	Deadweight	Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p	Engine Builders	Shipbuilders
—	Northam S.S. Co.	*Lord Canning* (651)	Tanker	11,347	17,300	510 × 69 × 37	14	Sin.-scr., 5-cyl., 2-str. Doxford diesel	5,500	Shipbuilders	Scotts' S.B.
Apr. —	Corpn. of Wallasey	*Royal Iris* (1448)	Pass. ferry and cruising	1,000	—	149 × 48.25 × 12.25	—	Tw.-scr., 6-cyl. diesel-electric	1,080	Metropolitan Vickers and Ruston & Hornsby	Wm. Denny
May —	Sigval Bergesen, Stavanger	*Dolfoon*	Tanker	16,900	24,000	623.5 b.p. and 580 b.p. × 78 × 42.5	—	Sin.-scr., 7-cyl., 2-str. B. & W. diesel	—	Shipbuilders	Harland & Wolff, Belfast
May —	Afran Transport Co.	*Magwa* (437)	Tanker	15,600	24,625	589 o.a. and 560 b.p. × 80 × 42.25	14	Sin.-scr., 6-cyl., 2-str. Doxford diesel	6,600	Hawthorn, Leslie	Furness S.B.
Commonwealth and Foreign Yards											
April 2	A/S Matros, Tonsberg	*Mim*	Cargo	—	3,000	323.75 o.a. and 299.75 b.p. × 43.92 × 27.875	13	Tr.-exp. steam	2,000	Shipbuilders	Trondhjems M.V.
Apr. 17	Danish State Rlys.	*Dronning Ingrid* (302)	Ferry	2,950	—	353.7 o.a. × 56.6 × 21.1	16.5	Tw.-scr., 6-cyl. B. & W. diesel	5,500	Shipbuilders	Elsinore S.B
Apr. 17	Rolandlinie Schiffahrt, Bremen	*Lahnstein*	Cargo	2,639	4,800	392.4 o.a. × 360.9 b.p. × 50 × 21.8	12	Diesel	2,400	—	Bremer Vulcan
Apr. 28	Knohr & Burchard, Hamburg	*Jersbek*	Cargo	2,175	3,800	317.25 o.a. and 295.66 b.p. × 45.33 × 19.16	12	Lentz steam	2,000	—	Lubecker Masch.-Ges.
Apr. 28	Rederi A/S Ruth, Oslo	*Ruth* (657)	Tanker	10,100	15,860	515.16 o.a. × 64 × 38.16	14.5	Sin.-scr., 8-cyl., 2-str. diesel	7,350	Shipbuilders	Gotaverken, Gothenburg
Apr. 30	Tankrederiet Gefion A/S (Eiv Evensen), Oslo	*Gimle* (331)	Tanker	10,499	16,210	533.25 o.a. and 500 b.p. × 63 × 38.5	15	Sin.-scr., 6-cyl., 2-str. M.A.N. diesel	6,000	Shipbuilders	Kockums M.V., Malmo
May 8	Oranje Line, Rotterdam	*Prins Frederik Willem* (522)	Cargo	1,535	2,800	258 b.p. × 42	14	Sin.-scr., 4-cyl., 2-str. diesel	1,800	Werkspoor N.V., Amsterdam	Scheeps. en Mach. " De Merwede," Hardinxveld
May 10	J. Lauritzen Rederi, Copenhagen	*Nerma Dan* (1015)	Tanker	10,560	16,300	515 b.p. × 64 × 38.5	15	Sin.-scr., 7-cyl., 2-str. Sulzer diesel	6,300	Karlstads M.V., Kristinehamn	Lindholmens Varv, Gothenburg

MARITIME NEWS IN BRIEF

From Correspondents at Home and Overseas

THREE 1950 Royal Certificates of Merit awarded to boys of the Prince of Wales Training School were presented by the Duchess of Kent at the 133rd anniversary meeting of the British Sailors' Society held at the Mansion House on May 16, under the chairmanship of the Lord Mayor of London. Sir Frederick Sykes, the honorary treasurer, said that, in common with all voluntary societies, there had been a decline in voluntary income since the end of the war. During 1950 the total ordinary income of the Society was £507,025, of which £125,500 (£122,900 in 1949) constituted voluntary income. During the course of the meeting Sir Kenneth R. Swan, chairman of the board of directors, announced that Lord Inverclyde had accepted the position of deputy-chairman of the Society.

Two members of the Dublin Port and Docks Board, Mr. D. A. Hegarty, general manager, and Mr. F. W. Bond, chief engineer, are shortly to travel to the United States under the E.C.A. Technical Assistance Scheme to study the various aspects of port operation in America. The Board has completed the construction of a new deep water quay, 405 ft. in length, on the south side of the River Liffey. An area of about eight acres at the back of the new quay has been reclaimed and has been leased to the Electricity Supply Board for storage in connection with a new power station.

AT the annual general meeting of the Dry Dock Owners' and Repairers' Central Council Mr. D. McCall, managing director of Menzies & Co., Ltd., was elected chairman for the ensuing year and Mr. A. P. Traill, director and general manager, Manchester Dry Docks Co., Ltd., and Mr. W. B. Johnstone, director, Alexander Stephen & Sons, Ltd., senior and junior vice-chairmen respectively.

RUNCIMAN (London), Ltd., have been appointed general United Kingdom freight agents for Cie. de Navigation Cyprien Fabre and Cie. de Navigation Fraissinet, for whom they have been acting as the United Kingdom passenger agents during the past year.

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SIR MAURICE DENNY, chairman of the Research Board of the British Shipbuilding Research Association, will give a review of the recent Clyde tests carried out on the jet-propelled ship *Lucy Ashton* on the opening day of the International Conference of Naval Architects and Marine Engineers at the Central Hall, London, S.W.1, on June 26. This will be the first public announcement regarding the trials. The experiments were undertaken by the British Shipbuilding Research Association, in conjunction with William Denny & Brothers, Ltd. The conference will be held at three centres, London, Glasgow and Newcastle.

THE "Risks Round the World" exhibition, the British Insurance Association's contribution to the City of London Festival celebrations, was opened last week at the Royal Exchange by the President of the Board of Trade, Sir Hartley Shawcross. The exhibition, open until the end of August, is designed to illustrate the range of risks carried by British insurance companies for interests throughout the world. A feature at the Royal Exchange is the first sixpence-in-the-slot machine for issuing accident insurance policies which effect an insurance for 24 hours with claims up to £1,000.

IT IS announced by Elder Dempster Lines, Ltd., Holland West-Afrika Lijn, N.V., Palm Line, Ltd., and John Holt Line, Ltd., that current rates of freight on all cargo, except cement, from United Kingdom and Continental berth ports to West African ports Dakar to Angola inclusive (except Lobito), will be subject to a surcharge of 15 per cent to cover the additional cost of chartering. The surcharge is effective with vessels scheduled to sail on and after June 9.

THE Anglo-Iranian Oil Co., Ltd., has announced that the addresses of its Cardiff and Newcastle agents are now Mann, George & Co., Ltd., Mercantile Chambers, 13 James Street, Cardiff Docks, Cardiff, and F. C. Strick & Co. (Newcastle), Ltd., Guildhall Chambers, Sandhill, Newcastle-on-Tyne, 1. A new agency has been appointed at Greenock, J. & J. Denholm, Ltd., Custom House Quay, Greenock.

THE death has occurred of Mr. Edward Hume, who was chief broker for Furness, Withy & Co., Ltd., in their insurance department until his retirement in 1946. He was elected an underwriting member of Lloyd's in 1919.

* * * *

WITH the recent allocation of 21 Liberty vessels by the U.S. National Shipping Authority to private shipping companies for operation under General Agency Agreements, the full fleet of 100 such vessels contemplated under the E.C.A. programme has been put into operation. The vessels have been assigned to a total of 32 operators. At April 21, 33 of these vessels had sailed from U.S. ports carrying 135,681 tons of coal and 180,709 tons of grain for countries having E.C.A. programmes. All the ships are scheduled to return with homebound cargoes of metallic ores.

NEW appointments have been announced by Metropolitan-Vickers Electrical Co., Ltd., following rearrangements in the general engineering department. Mr. W. Eccles has been appointed chief engineer, energy application engineering, and Mr. G. H. Jolley is now the assistant chief engineer of this department. Mr. N. R. D. Gurney has been appointed chief engineer, electrical general engineering, and Mr. W. E. Taylor has been made consulting engineer, rolling mills, in the same department. Mr. W. J. Price has been appointed chief engineer, mechanical general engineering.

AT THE annual meeting of the Short Sea Traders' Association Mr. K. W. Ratledge was elected chairman for the ensuing year. Mr. F. Whittock has been presented with a case of pipes on the occasion of his retirement from the Association after 37 years' service.

MR. F. FLETCHER HUNT has relinquished the chairmanship of the British & Continental Steamship Co., Ltd., but will remain on the board of the company. Mr. M. W. Wilson has been appointed chairman and managing director.

MR. A. C. HARTLEY, president of the Institution of Mechanical Engineers, has been appointed to the board of directors of Johnson & Phillips, Ltd. Mr. Hartley entered the firm as consultant at the beginning of this year. He was previously chief engineer of the Anglo-Iranian Oil Co., Ltd. During the Second World War he was connected with the "Pluto" cross-Channel pipe-lines, and the "Fido" fog clearance scheme on airfields. Mr. Hartley is a member of a number of institutions and is a Freeman of the City of London and a Liveryman of the Worshipful Company of Shipwrights

MR. ARTHUR HILLIER, chairman and managing director of the Sperry Gyroscope Co., Ltd., has been presented with a portrait of himself by the directors, senior executives and members of the staff, to commemorate 35 years' service with the company. Joining the company in 1916 as assistant secretary, Mr. Hillier became secretary in 1920 and a director in 1922. He was appointed director and general manager in 1933 and managing director the following year. In 1938 he was appointed chairman in succession to the late Marquis of Milford Haven, at the same time retaining his position as managing director

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